

Henry[®] Dundeq[™] System

Submittal Packet

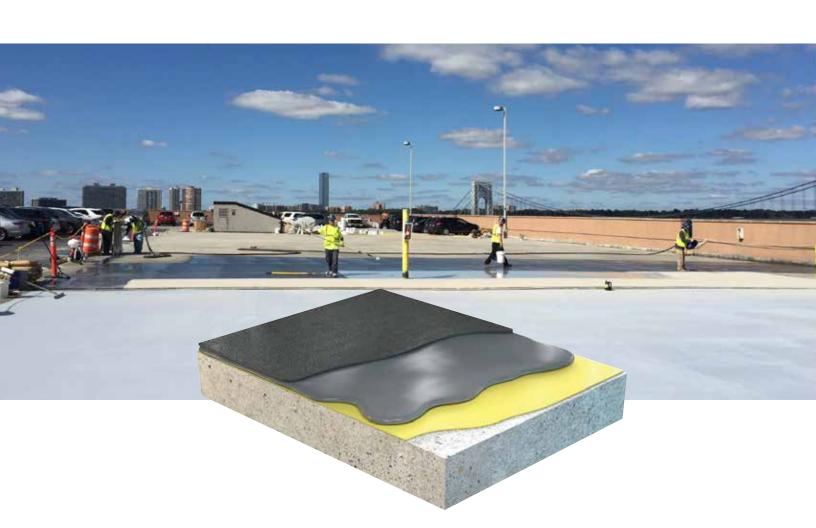


Table of Contents

Henry® Dundeq[™] System

Technical Data Sheets	
Membrane	
 Henry® Dundeq™ GP Flexcoat	3
Primer Options	
Henry® LV Primer	6
Henry® ST Primer	
Henry® STXL Primer	12
Henry® GC Epoxy Primer	15
Flashing Options	
Henry® Dundeq™ GP Flexcoat	18
Henry® Pumadeq™ Flex 31MV	21
Wearcoat Option	
Henry® GP Wearcoat	24
Topcoat Option	
Henry® GP Topcoat	27
Henry® PU Topcoat	30
Safety Data Sheets	
Henry® Dundeq™ GP Flexcoat Part A	33
Henry® Dundeq™ GP Flexcoat Part B	41
Henry® PU Topcoat Part A	49
Henry® PU Topcoat Part B	56
Henry® GP Wearcoat Part A	64
Henry® GP Wearcoat Part B	71
Architectural Details	
Henry® Dundeq™ System - All Details	79
Sample Warranty	
Dundeq [™] Pedestrian/Balcony Traffic 5 Year Material Warranty1	03
	05
Product Certification	
Henry® Dundeq™ Product Certification1	07
LEED Declarations	
	Λo
Henry® Dundeq™ LEED Information1	υO



Dundeq GP Flexcoat

100% Solids, Two-Component Polyurethane Membrane

Physical property	Typical value	Test method
Appearance	Gray	-
Solids Content by Volume	100%	ASTM D1644 Method A
VOC Content	<5 g/l	-
Adhesion	>435 psi on fully sanded primer	ASTM C794
Crack Bridging @ 22 mils	Pass	C1305
Elongation	650%	D412 (as per C957/957M)
Tensile Strength	1100 psi	D412 (as per C957/957M)
Hardness, Shore A	80	D2240 (as per C836)
Tear Resistance	300 pli	ASTM D624

Description

Henry® Dundeq™ GP Flexcoat is a 100% solids, two-component, elastomeric polyurethane membrane used as a waterproofing membrane in the Henry Dundeq System, a seamless, fully-adhered, durable waterproofing system for vehicular and pedestrian traffic surfaces. Dundeq GP Flexcoat is formulated to combine exceptional elongation with high tensile strength. Dundeq GP Flexcoat is low odor, has no solvents and low VOC's.

Features and benefits

- Exceptional elongation
- · High tensile strength
- Low odor
- No solvents
- Low VOCs

Usage

Dundeq GP Flexcoat is used as a waterproofing membrane in the **Henry Dundeq System**, a seamless, fully-adhered, durable waterproofing system for vehicular and pedestrian traffic surfaces. **Dundeq GP Flexcoat** is used for plaza decks, parking decks, split slabs, planters, balconies, and mechanical rooms.

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and Tech Talk.

Surface temperature must be at least 5° F above the dew point and rising.

Air and substrate temperatures must be between 50° F and 90° F.

Relative humidity should be less than 80%.

Surface Prep: Surfaces to be over-coated must be firm, dry and load bearing, free of loose and brittle particles, and contaminants that would impair adhesion.

If there are any questions about the suitability of a substrate, further advice should be sought from a Henry Representative and a small trial area should be applied and tested appropriately.

Product Mixing: Dundeq GP Flexcoat Parts A & B are pre-measured.

Pre-mix both Part A and Part B separately.

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle. Scrape the sides and bottom of the Part A mixing pail to remove and mix solids and achieve a uniform, streak free liquid.

Mix Ration by Volume:

- 1. Pour all of Part A and all of Part B into a third, separate clean container without hitting the sides.
- 2. Mix for two minutes.

Mix all of Part A with all of Part B.

Henry Dundeq GP Flexcoat

Do not mix in an up and down motion.

Do not mix new material with old, uncured material as this can significantly reduce work times.

Decant newly mixed material into smaller containers or onto substrate and spread to prolong working time.

Pot Life @ 68° F: 10 – 15 minutes

The working time and viscosity of **Dundeq GP Flexcoat** will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Application: Dundeq GP Flexcoat is applied evenly by notched (3/16") squeegee.

Back roll with a heavy-duty roller arm and medium nap roller to assist leveling.

Take extra care not to trap air, which may cause bubbles, when rolling.

A continuous application should be used to minimize color lines and streaking.

Application Rate: Apply in one coat at a rate of approximately: 70 sf/gallon (350 sf/5 gal) on a primed, CSP 3-4 profile substrate.

WFT-DFT: 22 mils

Re-coat and Traffic times after application:

Minimum @ 68° F = 4 hours.

Maximum 24 hours.

Can be walked on after 4 hours @ 68° F. Colder temperatures will increase this time.

Product Restrictions and Limitations: Must be overcoated within 24 hours of application.

If this time is exceeded, lightly abrade and wipe with Acetone or MEK and a clean cloth. Allow solvent to evaporate.

Take extra care not to trap air, which may cause bubbles, when rolling.

A continuous application should be used to minimize color lines and streaking.

Note: Before using **Dundeq GP Flexcoat**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves and safety goggles with slide shields during mixing and application.

Respiratory masks should be worn at all times when adequate ventilation does not exist.

A NIOSH/MSHA (TC-23C-1809), multi gas vapor respirator is acceptable.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Avoid direct contact with skin or eyes.

Uncured resins and curing agents may be alkaline, toxic or both.

They may cause allergic reactions or hypersensitivity reactions.

Contact with skins - wash immediately with soap and water.

Contact with eyes – rinse immediately with lots of water and seek medical attention.

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

• For Henry System Warranty, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Follow all health and safety instructions on Safety Data Sheets (SDS).

Clean tools and equipment with Acetone or MEK.

Ensure all materials is mixed and cured before disposal, in accordance with federal, state and local regulations.

Dispose of all packaging in accordance with federal, state and local regulations.

Wash body with soap and water.

Packaging Size

Part A 4 gal

Part B 1 gal

www.henry.com

Storage

One year in original, unopened containers stored between 50° F and 90° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on Henry's® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.



TECHNICAL DATA SHEET LV Primer

Low Viscosity, Epoxy Primer

Physical property	Typical value	Test method
Appearance	Clear	-
Solids Content by Volume	100%	ASTM D1644-2001, Method A
Viscosity @ 68 F	400 cps	D2196-10
Adhesion	> 435 psi, substrate failure	C1583/C1583M-04
VOC Content (maximum)	0 g/l	ASTM C1250-05

Description

Henry® LV Primer is a 100% solids, two-component, low viscosity, epoxy primer.

Features

- Used to prime surfaces before further resin application
- Also fills cracks and small pores in surfaces
- Low odor, solvent free and VOC compliant
- After fully cured, can be left exposed to rain and ponded water

Usage

LV Primer is used as a primer on concrete, wood, exterior cover/cement boards and steel.

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and Tech Talk.

Air and substrate temperatures must be between 50° F and 90° F.

The surface temperature must be at least 5° F above the dew point and rising. Use a surface dew point meter. Concrete must be cured a minimum of 28 days.

Surface Prep: Substrates to be coated must be free of laitance and contaminants that would impair adhesion.

Do not apply on substrate that has been treated with any type of form release agent or sealer.

- Concrete should be shot blasted or mechanically abraded
- Surface profile must meet CSP 3-4
- Wood and exterior cement or cover boards must be exterior grade, dry, clean and fixed with exterior screws

Application: LV Primer should be applied out of direct sunlight and when temperatures are falling to minimize the risk of pinholes due to moisture drive. If there are any doubts about the suitability of a substrate, further advice should be sought from a Henry representative and a small trial area applied and tested appropriately.

Product Mixing: LV Primer Parts A & B are pre-measured.

Mix all Part A with all of Part B.

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle.

Mix Ratio by Volume:

- 1. Dispense Part A into a separate, clean, dry mixing pail. Mix for 30 seconds, taking care not to hit the sides.
- 2. Add Part B, taking care not to hit the sides, and mix for a minimum 1 minute.

Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free, homogenous liquid. Scrape out all the material from the mixing pail. Decant to a new pail and use immediately.

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently.

Pot Life @ 68° F: 20 minutes. The working time of LV Primer will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Product Application: LV Primer is applied evenly by a flat squeegee and back rolled with a medium nap (3/8") roller. Apply slight pressure on the roller to ensure all voids and pores are filled and remove all material puddles.

Application Rate:

200 – 300 sq/ft gal (600 – 900 sf/3 gal kit), on CSP 3-4 profile substrate
 Allow for saturation of rollers and brushes

WFT-DFT: 5-8 mils, depending on surface porosity

Re-coat and Traffic Times after application:

Minimum @ 68° F = 8 hours.

Maximum @ 68° F = 24 hours.

Colder temperatures will increase this time.

If this maximum time is exceeded, LV Primer must be wiped with a clean cloth and MEK. It may require light abrasion.

Product Restrictions and Limitations:

LV Primer will not bridge cracks or joints in the substrate.

Cannot prevent moisture mitigation – use Henry® GC Primer or Henry® GCXL Primer.

It cannot be used for aluminum, copper, brass or galvanized metals. Use Henry® Pumadeg Primer 20.

It can be rained on 8 hours after installation @ 68° F. Colder temperatures will increase this time.

If LV Primer gets wet during cure (rain, dew or fog), the surface will "bloom", evidenced by white spots that must be ground off. It must then be re-applied.

NOTE: Before using **LV Primer**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves, and safety goggles with side shields during mixing and application.

Respiratory makes should be worn at all times when adequate ventilation does not exist.

A NIOSH/MSHA (TC-23C-1809), multi gas vapor respirator is acceptable.

Avoid direct contact with skin or eyes.

Uncured epoxies are corrosive, toxic or both. They may cause allergic reactions or hypersensitivity reactions.

Contact with skin – wash immediately with soap and water.

Contact with eyes - rinse immediately with lots of water and seek medical attention.

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to surface porosity, project conditions and working methods.

• For Henry System Warranty and Gold Seal Warranty requirements, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Clean-up of tools and equipment may be accomplished by using Acetone or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

Product contents / packaging size

Part A 4 gal / 4 gal container Part B 1 gal / 1 gal container

www.henry.com

Henry LV Primer

Storage

One year in unopened containers stored between 50° F and 80° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

Epoxy Primer

Revision Date: 11/5/2019

Physical property	Typical value	Test method
Appearance	Clear/Amber	-
Solids Content by Volume	100%	ASTM D1644-2001, Method A
Viscosity @ 68F, mixed	1050cps	ASTM D2196-10
Adhesion	> 435 psi, substrate failure	C1583/C1583M-04
VOC Content (maximum)	0 g/l	ASTM C1250-05

Description

Henry® ST Primer is a 100% solids, two-component, epoxy primer.

Features

- Designed to provide a thick resin film, capable of holding aggregate,
- Also fills cracks and small pores in surfaces
- Low odor, solvent free and VOC compliant
- · After fully cured, can be left exposed to rain and ponded water

Usage

ST Primer is used as a primer on concrete, wood, exterior cover/cement boards and steel.

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and Tech Talk. Air and substrate temperatures must be between 50° F and 90° F. For temperatures below 50° F, use **Henry**® **STXL Primer**. Concrete must be cured for a minimum of 28 days.

Surface Prep: Substrates to be coated must be free of laitance and contaminants that would impair adhesion.

Do not apply on substrate that has been treated with any type of form release agent or sealer.

- Concrete should be shot blasted or mechanically abraded
- Surface profile must meet CSP 3-4
- Steel should be mechanically abraded by power tool (i.e. disc grinder or wire cup brush) in accordance with SSPC SP3.
 Remove oil and other residue by wiping with MEK or Acetone and a clean cloth.
 Prime immediately after surface preparation to avoid flash rusting.
- Wood or Roof boards must be exterior grade, dry, clean and fixed with exterior screws

Application: Apply **ST Primer** when temperatures are constant or falling and out of direct sunlight, to minimize the risk of pinholes, blister formation or delamination due to moisture drive.

If there are any doubts about the suitability of a substrate, further advice should be sought from a Henry representative and a small trial area applied and tested appropriately.

Product Mixing: ST Primer Parts A (2 gallons) & B (1 gallon) are pre-measured.

Mix all Part A with all of Part B.

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle.

Mix Ratio by Volume:

- 1. Dispense Part A into a separate, clean, dry mixing pail. Mix for 30 seconds, taking care not to hit the sides.
- 2. Add Part B, taking care not to hit the sides, and mix for a minimum 1 minute.

Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free, homogenous liquid. Scrape out all the material from the mixing pail. Decant to a new pail and use immediately

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently.

Pot Life @ 68° F: 20 minutes. The working time of ST Primer will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Product Application: ST Primer is applied evenly by a flat squeegee and back rolled with a medium nap (3/8") roller. Apply slight pressure on the roller to ensure all voids and pores are filled and remove all material puddles.

Broadcast clean, dry aggregate into wet resin as per Henry specification, typically sieve size #20-50 @ 0.25lbs/sf

Application Rate:

135sq.ft/gal (400sq.ft/3-gal. kit) on CSP 3-4 profile substrate
 Allow for saturation of rollers and brushes

WFT-DFT: 10 mils, depending on surface porosity

Re-coat and Traffic Times after application:

Minimum @ 68° F = 4 hours.

Maximum 48 hours.

No maximum when fully broadcast with sand.

If this maximum time is exceeded, ST Primer must be abraded (to a dull finish), wiped with Acetone or MEK and clean cloths.

Product Restrictions and Limitations:

ST Primer will not bridge cracks or joints in the substrate.

Cannot prevent moisture mitigation - use Henry® GC or Henry® GCXL Primer

It cannot be used for aluminum, copper, brass or galvanized metals. Use Henry® Pumadeq Primer 20.

It can be rained on 4 hours after installation @ 68 F. Colder temperatures will increase this time.

If ST Primer gets wet during cure (rain, dew or fog), the surface will "bloom", evidenced by white spots that must be ground off. It must then be re-applied.

NOTE: Before using **ST Primer**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves, and safety goggles with side shields during mixing and application.

When **ST Primer** is applied in enclosed areas without natural ventilation, forced ventilation must be arranged. Avoid strong concentration of vapor as well as direct contact with skin or eyes.

If concentration exceeds recommended limits in SDS, a NIOSH approved respirator (OSHA 29 CFR 1910.134) is required. Avoid direct contact with skin or eyes.

Uncured epoxies are corrosive, toxic or both. They may cause allergic reactions or hypersensitivity reactions.

Contact with skin - wash immediately with soap and water

Contact with eyes - rinse immediately with lots of water and seek medical attention

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to surface porosity, project conditions and working methods.

 For Henry System Warranty and Gold Seal Warranty requirements, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Clean-up of tools and equipment may be accomplished by using Acetone or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

Product contents / packaging size

Part A 2 gal / 2 gal container Part B 1 gal / 1 gal container

www.henry.com

Henry ST Primer

Storage

One year in unopened containers stored between 50° F and 80° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

STXL Primer

Fast Curing, Low Temperature Epoxy Primer

Physical property	Typical value	Test method
Appearance	Clear/Amber	-
Solids Content by Volume	100%	ASTM D1644-2001, Method A
Viscosity @ 68F, mixed	1050cps	ASTM D2196-10
Adhesion	> 435 psi, substrate failure	C1583/C1583M-04
VOC Content (maximum)	0 g/l	ASTM C1250-05

Description

Henry® STXL Primer is a low temperature, fast curing, 100% solids, two-component, epoxy primer.

Features

- It is used when application temperatures below 50° F, or if faster (than ST Primer) cure times are required.
- Designed to provide a thick resin film, capable of holding aggregate,
- Also fills cracks and small pores in surfaces
- Low odor, solvent free and VOC compliant
- · After fully cured, can be left exposed to rain and ponded water

Usage

STXL Primer is used as a primer on concrete, wood, exterior cover/cement boards and steel

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and Tech Talk. Air and substrate temperatures must be between 40° F and 90° F.

Concrete must be cured a minimum 28 days.

Surface Prep: Substrates to be coated must be free of laitance and contaminants that would impair adhesion.

Do not apply on substrate that has been treated with any type of form release agent or sealer.

- · Concrete should be shot blasted or mechanically abraded
- Surface profile must meet CSP 3-4
- Do not acid etch
- Steel should be mechanically abraded by power tool (i.e. disc grinder or wire cup brush) in accordance with SSPC SP3.
 Remove oil and other residue by wiping with MEK or Acetone and a clean cloth
 Prime immediately after surface preparation to avoid flash rusting
- Wood or Roof Boards must be exterior grade, dry, clean and fixed with exterior screws

Application: Apply **STXL Primer** when temperatures are constant or falling and out of direct sunlight, to minimize the risk of pinholes, blister formation or delamination due to moisture drive

If there are any doubts about the suitability of a substrate, further advice should be sought from a Henry representative and a small trial area applied and tested appropriately.

Product Mixing: STXL Primer Parts A (2 gallons) & B (1 gallon) are pre-measured.

Mix all Part A with all of Part B

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle.

Mix Ratio by Volume:

- 1. Dispense Part A into a separate, clean, dry mixing pail. Mix for 30 seconds, taking care not to hit the sides.
- 2. Add Part B, taking care not to hit the sides, and mix for a minimum 1 minute.

Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free, homogenous liquid. Scrape out all the material from the mixing pail. Decant to a new pail and use immediately

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently.

Pot Life @ 68° F: 15 minutes. The working time of STXL Primer will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Product Application: STXL Primer is applied evenly by a flat squeegee and back rolled with a medium nap (3/8") roller. Apply slight pressure on the roller to ensure all voids and pores are filled and remove all material puddles.

Broadcast clean, dry aggregate into wet resin as per Henry specification, typically sieve size #20-50 @ 0.25lbs/sf

Application Rate:

135sq.ft/gal (400sq.ft/3-gal. kit) on CSP 3-4 profile substrate
 Allow for saturation of rollers and brushes

WFT-DFT: 10 mils, depending on surface porosity

Re-coat and Traffic Times after application:

Minimum @ 40° F = 18 hours

Maximum 48 hours.

No maximum when fully broadcast with sand

STXL Primer can be used for faster cure times at lower temperatures

If this maximum overcoat time is exceeded, **ST Primer** must be abraded (to a dull finish), wiped with Acetone or MEK and clean cloths.

Product Restrictions and Limitations:

STXL Primer will not bridge cracks or joints in the substrate.

Cannot prevent moisture mitigation – use Henry® GC Primer or Henry® GCXL Primer

It cannot be used for aluminum, copper, brass or galvanized metals. Use Henry® Pumadeq Primer 20.

It can be rained on 18 hours after installation @ 40° F. Colder temperatures will increase this time.

If STXL Primer gets wet during cure (rain, dew or fog), the surface will "bloom", evidenced by white spots that must be ground off. It must then be re-applied.

NOTE: Before using **STXL Primer**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves, and safety goggles with side shields during mixing and application.

When **STXL Primer** is applied in enclosed areas without natural ventilation, forced ventilation must be arranged. Avoid strong concentration of vapor as well as direct contact with skin or eyes.

If concentration exceeds recommended limits in SDS, a NIOSH approved respirator (OSHA 29 CFR 1910.134) is required.

Avoid direct contact with skin or eyes.

Uncured epoxies are corrosive, toxic or both. They may cause allergic reactions or hypersensitivity reactions.

Contact with skin - wash immediately with soap and water

Contact with eyes - rinse immediately with lots of water and seek medical attention

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to surface porosity, project conditions and working methods.

• For Henry System Warranty and Gold Seal Warranty requirements, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Clean-up of tools and equipment may be accomplished by using Acetone or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

Product contents / packaging size

Part A 2 gal / 2 gal container Part B 1 gal / 1 gal container

Henry® Company, 999 N. Pacific Coast Highway, Ste. 800, El Segundo, CA 90245 **Tel:** 800-486-1278 **Email:** techservices@henry.com

www.henry.com

Henry STXL Primer

Storage

One year in unopened containers stored between 50° F and 80° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.



TECHNICAL DATA SHEET

GC Epoxy Primer

Moisture Mitigating Epoxy-Based Primer

Physical Property per ASTM F3010-13	Typical Value	Test Method
Alkali Insensitivity	No effect, ph 14, after 14 days	ASTM D1308-02
Concrete RH resistance	Up to 100%	ASTM F2170-09
Solids Content by Volume	100%	ASTM D1644-2001 Method A
Adhesion	> 435 psi, substrate failure	ASTM C1583/ ASTM C1583M-04
Viscosity @ 68 °F (mixed)	1400-1800 cps	ASTM D2196-10
Moisture vapor emission rate reduction (MVER)	25lbs/24hrs/1000sf, reduced to 0.2lbs/24hrs/1000sf	ASTM F1869-10
Water Vapor Transmission	Over 98% reduction = less than 0.1 perms	ASTM E96M-05 (Wet Method)
VOC Content (maximum)	0 g/l	ASTM C1250-05 (as per C836M-10, C957M-10)

Description

Henry[®] GC Epoxy Primer is a 100% solids, two-component, epoxy sealer/primer.

Features

- Meets ASTM F3010-13 Requirements
- Specially formulated to be applied on saturated (up to 100% relative humidity) substrates
- Reduces moisture vapor emission rate (MVER) below 3lbs/24hrs/1000sf
- Can be applied on green (5 days after placement) concrete
- Highly alkaline resistant (concrete ph 14)
- Has no odor, solvent-free or zero VOC for LEED EQ 4.2 credit

Usage

Henry® GC Epoxy Primer is used to seal and prevent vapor drive (moisture emission) in concrete, wood, and exterior roof boards.

Application

Site conditions: All surfaces should be prepared as per the approved Henry[®] specification. Ensure water sealed in substrate will not affect other parts of building. Substrate moisture testing can be carried out to ASTM F2170-09 (RH) and F1869-10 (vapor pressure) but is not required. Air and substrate temperatures must be between 50 °F and 90 °F.

Surface preparation: Substrates to be coated must be free of laitance and contaminants that would impair adhesion. Do not apply on substrates that have been treated with any type of form release agent or sealer.

- · Concrete should be shot blasted or mechanically abraded
- Do not acid etch
- · Surface profile must meet CSP-3, with no imperfections which would prevent the minimal film thickness being formed
- · Fill all voids and bug holes
- Remove concrete reinforcing fibers
- Wood or Roof Board must be exterior grade, dry, clean and fixed with exterior deck screws
- Apply Henry[®] GC Epoxy Primer, when temperatures are constant or falling and out of direct sunlight, to minimize the risk
 of pinholes, blister formation or delamination due to substrate vapor pressure increase

If there are any doubts about the suitability of a substrate, further advice should be sought from a Henry[®] representative and a small trial area applied and tested appropriately.

www.henry.com

Product mixing: Henry® GC Epoxy Primer Parts A (2 gallons) & B (1 gallon) are pre-measured.

Mix all Part A (resin) with all of Part B (hardener).

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (JIFFY) mixing paddle.

Mix Ratio by Volume:

- 1) Pre-mix Part A (2 gallons), for 30 seconds in pail, to disperse color pigment uniformly. Dispense into separate, clean bucket, being careful not to hit sides.
- 2) Add Part B (1 gallon), taking care not to hit the sides, and mix for $1 1\frac{1}{2}$ minutes.

Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free, homogenous liquid. Scrape out all the material from the mixing pail.

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently.

Pot Life @ 68 °F: 20-25 minutes. The working time of Henry® GC Epoxy Primer will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures, and how quickly it is removed from the mixing pail and spread on the substrate.

Product Application: A mock-up can be carried out to decide the exact application rate (within Henry[®] guidelines) required to prevent pinholes in the cured coating and completely seal the substrate.

Henry® GC Epoxy Primer is normally applied in one coat (gray color).

It is applied evenly by notched squeegee and back rolled (at right angles to squeegee application) with a medium nap (3/8") roller. Apply slight pressure on the roller to ensure all voids and pores are filled and remove all material puddles. A monolithic and fully cured film must be formed.

It is then to be inspected for any pinholes or voids, which are then filled by putty knife, using **Henry**[®] **GC Epoxy Primer** and **Henry**[®] **Filler**, to form a heavy paste which can block the vapor emmission.

After application, in addition to a visual inspection, the **Henry**[®] **GC Epoxy Primer** surface can be tested to ASTM D4263 (taped plastic sheet), to ensure no moisture vapor is passing through.

Application Rate:

- 80-100 sq.ft/gal (240-300sq.ft./3 gal. kit)
- If required, second coat (red color), @ 125-150 sq.ft./gal (375-450sq,ft,/3 gal. kit)

WFT-DFT: 15 mils/coat, minimum

Re-coat and Traffic Times after application:

Minimum @ 68 °F = 4 hours, Maximum 48 hours. Colder temperatures will increase this time.

If overcoat time is exceeded, GC Primer must be abraded (to a dull finish), wiped with Acetone or MEK and clean cloths. A second coat (red color) must be applied @ 130 sq.ft/gal (400 sq.ft/3 gal. kit).

The surface temperature of the first coat must at least 6° F above the dew point and rising. Use a surface dew point meter.

If required, the second coat (only), can be fully broadcast with Henry[®] approved aggregate to allow for an unlimited overcoat time or a shear bond of the next coating.

Product Restrictions and Limitations: Henry GC Epoxy Primer will not bridge moving cracks or moving joints in the substrate. It cannot be used for aluminum, copper, stainless or galvanized metals.

It can be rained or resist surface dampness 4 hours after installation @ 68 °F. Colder temperatures will increase this time. If GC Primer gets wet during cure (rain, dew or fog), the surface will "bloom", evidenced by white spots that must be ground off. It must then be re-applied.

NOTE: Before using **Henry**[®] **GC Epoxy Primer**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves and safety goggles with side shields during mixing and application.

When **Henry**[®] **GC Epoxy Primer** is applied in enclosed areas without natural ventilation, forced ventilation must be arranged. Avoid strong concentration of vapor as well as direct contact with skin or eyes.

If concentration exceeds recommended limits in SDS, a NIOSH approved respirator (OSHA 29 CFR 1910.134) is required. Uncured polymers and curing agents may be alkaline, toxic or both. They may cause allergic reactions or hypersensitivity reactions.

Contact with skin – wash immediately with soap and water.

Contact with eyes – rinse immediately with lots of water and seek medical attention.

Henry[®] Company, 999 N. Pacific Coast Highway., Ste. 800 El Segundo, CA 90245 Tel: 800-486-1278 Email: techservices@henry.com

270 Lilian. techsel vices@herriy.com

Henry[®] GC Epoxy Primer

Clean-up

Clean-up of tools and equipment may be accomplished by using, Acetone, or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state and local regulations. Dispose of all packaging in accordance with federal, state and local regulations.

Packaging

KIT = 3 gallons in plastic pails Part A Resin = 2 gallons Part B Hardener = 1 gallon

Colors

Gray Red

Shelf Life/ Storage

One year in unopened containers stored between 55 °F and 90 °F under dry, ventilated conditions and out of direct sunlight. Lower temperatures may cause crystallization. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on Henry's® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

www.henry.com



Dundeq GP Flexcoat

100% Solids, Two-Component Polyurethane Membrane

Physical property	Typical value	Test method
Appearance	Gray	-
Solids Content by Volume	100%	ASTM D1644 Method A
VOC Content	<5 g/l	-
Adhesion	>435 psi on fully sanded primer	ASTM C794
Crack Bridging @ 22 mils	Pass	C1305
Elongation	650%	D412 (as per C957/957M)
Tensile Strength	1100 psi	D412 (as per C957/957M)
Hardness, Shore A	80	D2240 (as per C836)
Tear Resistance	300 pli	ASTM D624

Description

Henry® Dundeq™ GP Flexcoat is a 100% solids, two-component, elastomeric polyurethane membrane used as a waterproofing membrane in the Henry Dundeq System, a seamless, fully-adhered, durable waterproofing system for vehicular and pedestrian traffic surfaces. Dundeq GP Flexcoat is formulated to combine exceptional elongation with high tensile strength. Dundeq GP Flexcoat is low odor, has no solvents and low VOC's.

Features and benefits

- Exceptional elongation
- · High tensile strength
- Low odor
- No solvents
- Low VOCs

Usage

Dundeq GP Flexcoat is used as a waterproofing membrane in the **Henry Dundeq System**, a seamless, fully-adhered, durable waterproofing system for vehicular and pedestrian traffic surfaces. **Dundeq GP Flexcoat** is used for plaza decks, parking decks, split slabs, planters, balconies, and mechanical rooms.

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and Tech Talk.

Surface temperature must be at least 5° F above the dew point and rising.

Air and substrate temperatures must be between 50° F and 90° F.

Relative humidity should be less than 80%.

Surface Prep: Surfaces to be over-coated must be firm, dry and load bearing, free of loose and brittle particles, and contaminants that would impair adhesion.

If there are any questions about the suitability of a substrate, further advice should be sought from a Henry Representative and a small trial area should be applied and tested appropriately.

Product Mixing: Dundeq GP Flexcoat Parts A & B are pre-measured.

Pre-mix both Part A and Part B separately.

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle. Scrape the sides and bottom of the Part A mixing pail to remove and mix solids and achieve a uniform, streak free liquid.

Mix Ration by Volume:

- 1. Pour all of Part A and all of Part B into a third, separate clean container without hitting the sides.
- 2. Mix for two minutes.

Mix all of Part A with all of Part B.

Henry Dundeq GP Flexcoat

Do not mix in an up and down motion.

Do not mix new material with old, uncured material as this can significantly reduce work times.

Decant newly mixed material into smaller containers or onto substrate and spread to prolong working time.

Pot Life @ 68° F: 10 – 15 minutes

The working time and viscosity of **Dundeq GP Flexcoat** will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Application: Dundeq GP Flexcoat is applied evenly by notched (3/16") squeegee.

Back roll with a heavy-duty roller arm and medium nap roller to assist leveling.

Take extra care not to trap air, which may cause bubbles, when rolling.

A continuous application should be used to minimize color lines and streaking.

Application Rate: Apply in one coat at a rate of approximately: 70 sf/gallon (350 sf/5 gal) on a primed, CSP 3-4 profile substrate.

WFT-DFT: 22 mils

Re-coat and Traffic times after application:

Minimum @ 68° F = 4 hours.

Maximum 24 hours.

Can be walked on after 4 hours @ 68° F. Colder temperatures will increase this time.

Product Restrictions and Limitations: Must be overcoated within 24 hours of application.

If this time is exceeded, lightly abrade and wipe with Acetone or MEK and a clean cloth. Allow solvent to evaporate.

Take extra care not to trap air, which may cause bubbles, when rolling.

A continuous application should be used to minimize color lines and streaking.

Note: Before using **Dundeq GP Flexcoat**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves and safety goggles with slide shields during mixing and application.

Respiratory masks should be worn at all times when adequate ventilation does not exist.

A NIOSH/MSHA (TC-23C-1809), multi gas vapor respirator is acceptable.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Avoid direct contact with skin or eyes.

Uncured resins and curing agents may be alkaline, toxic or both.

They may cause allergic reactions or hypersensitivity reactions.

Contact with skins - wash immediately with soap and water.

Contact with eyes – rinse immediately with lots of water and seek medical attention.

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

• For Henry System Warranty, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Follow all health and safety instructions on Safety Data Sheets (SDS).

Clean tools and equipment with Acetone or MEK.

Ensure all materials is mixed and cured before disposal, in accordance with federal, state and local regulations.

Dispose of all packaging in accordance with federal, state and local regulations.

Wash body with soap and water.

Packaging Size

Part A 4 gal

Part B 1 gal

www.henry.com

Storage

One year in original, unopened containers stored between 50° F and 90° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on Henry's® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

TECHNICAL DATA SHEET

Pumadeq[™] Flex 31MV

Cold Fluid-Applied, PUMA, Reinforced, Flashing Membrane

Physical Property	Typical Value	Test Method
Appearance	White	-
Application Temperature (Ambient)	20 °F to 90 °F (-6 °C to 32 °C), can be lower	-
Abrasion Resistance	64mg	ASTM C501-84 (2009) - C17 wheel, 1000 grams, 1000 cycles
Hardness	35, Shore D	ASTM C2240-05 (as per C836M-10)
Solids Content by Volume	100%	ASTM D1644-2001 Method A
Adhesion	> 425 psi, substrate failure	ASTM C1583/ ASTM C1583M-04
Tensile Strength	1680 psi	ASTM D638-08
Elongation	283%	ASTM D638-08
VOC Content (maximum)	0 g/l	ASTM C1250-05

Description

Henry® Pumadeq™ Flex 31MV (medium viscosity) is an elastic, viscous, waterproofing membrane based on polyurethane methyl methacrylate (PUMA) technology. Pumadeq technology combines the speed of PMMA technology in its application, with the elasticity of polyurethane technology. PUMA technology exhibits much greater elongation and flexibility than PMMA technology. Pumadeq Flex 31MV can be applied to vertical and horizontal surfaces as a flashing membrane.

Features

- Cures within 1 hour, including temperatures below 40 °F (4 °C)
- Abrasion, Puncture, and UV Resistant
- Superior Elasticity vs PMMA technology
- Solvent-Free
- No VOC's

Usage

Pumadeq Flex 31MV forms a waterproofing flashing membrane in the Henry® Pumadeq System. Pumadeq System applications:

- Protected Membrane Roofing
- IRMA
- Plaza Decks
- Green Roofs
- Split Slabs
- Parking Decks
- Balconies and Walkways
- Water Retention

Application

Site conditions: Provide odor control, including air fans and exhausts.

Seal air intakes ,with activated carbon filters, nearby windows and doors.

Ensure a constant supply of "fresh air", required to remove monomers (heavier than air) from the resin surface and allow for cure.

Surface preparation: All surfaces should be prepared as per the approved Pumadeq System specification.

The surface temperature must be at least 5 °F (-15 °C) above the dew point and rising. Use a surface dew point meter.

Air and surface temperatures must be between 20 °F (-7 °C) and 90 °F (32 °C).

For temperatures below 40 °F (4 °C) consult Henry Product Support: 800-486-1278

Any surface or previous application of the Pumadeq membrane must be free of dust and contaminants that would impair adhesion

Revision Date: 3/25/2021

of **Pumadeq Flex 31MV**. If the surface is contaminated or overcoat times between Pumadeq resins exceed 48 hours, wipe with **Pumadeq Cleaning Fluid** and clean cloths. After **Pumadeq Cleaning Fluid** evaporates (15 minutes), apply **Pumadeq Flex 31MV** within 1 hour or re-apply **Pumadeq Cleaning Fluid**.

If there are any doubts about the suitability of a substrate, further advice should be sought from Henry[®] Product Support and a small trial area applied and tested appropriately.

Product mixing: Prior to using **Pumadeq Flex 31MV**, it must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with a clean, spiral, mixing paddle (Jiffy type, sized according to material amount mixed), to achieve a uniform distribution of the catalyst and paraffin contained in the product.

Only catalyze the amount of material that can be applied within the estimated pot life (10-15 minutes). Be aware that temperature conditions vary in areas of project and at different times of day. Adjust catalyst accordingly.

It is recommended to start by catalyzing 1 gallon of Pumadeq Flex 31MV to determine pot life.

- 1) Pre-mix Pumadeq Flex 31MV for minimum 1 minute
- 2) Then mix resin together with **Henry**® **Pumadeq Catalyst**, for 1 minute minimum A 1 volume oz. scoop is provided with each pail of catalyst
- 3) Pumadeq Catalyst volume is noted below and is determined by the average of three temperatures: Pumadeq Flex 31MV temperature, ambient temperature, and substrate temperature.

At temperatures below 40 °F (4 °C), consult Henry® Product Support: 800-486-1278.

```
40 °F (4 °C)\rightarrow add 10 volume oz. per gallon 50 °F (10 °C)\rightarrow add 8 volume oz. per gallon 60 °F (16 °C)\rightarrow add 6 volume oz. per gallon 70 °F (21 °C)\rightarrow add 4 volume oz. per gallon 80 °F (27 °C)\rightarrow add 3 volume oz. per gallon 90 °F (32 °C)\rightarrow add 2 volume oz. per gallon
```

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently.

Pot life: 10-15 minutes if **Pumadeq Catalyst** mix volumes followed. The working time of all **Pumadeq System** materials will be influenced by the amount of **Pumadeq Catalyst** added, the length of time they are mixed, how quickly they are removed from the mixing pail, and the substrate and ambient temperatures. Apply onto substrate and spread to prolong working time.

Product application: For best results, use small batch sizes (start with 1 gallon). After mixing thoroughly, apply onto surface, as soon as possible. **Pumadeg Flex 31MV** is applied evenly by medium nap (1/2") roller and brush.

Do not install **Pumadeq Flex 31MV** beyond cured primer.

Extend Pumadeq Flex 31MV one (1) inch (2.5 cm) beyond anticipated area of fabric reinforcement.

Roll or brush fabric for proper adhesion and removal of voids, folds, and wrinkles.

Lap adjoining fabric edges a minimum of three (3) inches (7.5 cm).

Ensure voids at edges of Henry® Pumadeq Fleece are filled with Pumadeq Flex 31MV.

Application rate: Install one (1) layer of Pumadeg Flex 31MV at 30 sq.ft./gal.

Back coat N-Fleece with Pumadeq™ Flex 31MV before applying on vertical surfaces.

Apply second layer of **Pumadeq Flex 31MV** at 50 sq.ft./gal.

Total rate for two coats = 20 sq.ft./qal.

Allow for saturation of rollers and brushes.

Rates will change depending on surface profile (>CSP 3-4).

Thickness: Wet and dry film thickness (WFT- DFT): 80 mils

Re-coat and traffic times: Minimum 1 hour. If the surface is contaminated or overcoat times exceed 48 hours, clean with a clean cloth and Henry® Pumadeq Cleaning Fluid. Allow Pumadeq Cleaning Fluid to evaporate before over coating. The new coating must be applied after 15 minutes minimum, 1 hour maximum of Pumadeq Cleaning Fluid application or it will have to be re-applied. MEK or Acetone can also be used, following the same procedures.

Product restrictions and limitations: If under catalyzed or mixing not thorough, the resin will not cure (remain sticky and smell). It must be completely removed by scrapping and wiping with **Pumadeq Cleaning Fluid.**

Revision Date: 3/25/2021

NOTE: Before using **Pumadeq Flex 31MV**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves, and safety goggles with side shields during mixing and application.

When **Pumadeq Flex 31MV** is applied in enclosed areas without natural ventilation, forced ventilation must be arranged. Avoid strong concentration of vapor as well as direct contact with skin or eyes.

If concentration exceeds recommended limits in SDS, a NIOSH approved respirator (OSHA 29 CFR 1910.134) is required.

Pumadeq Flex 31MV has a low flashpoint; keep away from all sources of ignition and do not smoke.

Uncured polymers, resins and catalyst powder may be toxic. They may cause allergic reactions or hypersensitivity reactions.

Contact with skin – wash immediately with soap and water

Contact with eyes – rinse immediately with lots of water and seek medical attention

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

• For Henry® System Warranty and Gold Seal Warranty requirements, refer to the appropriate approved Henry® specification for application and coverage rate requirements.

Clean-up

Clean-up of tools and equipment may be accomplished by using **Pumadeq Cleaning Fluid**, Acetone, or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

Packaging

2.5 gallons, in metal pail5 gallons, in metal pail

Colors

White Gray

Shelf Life/ Storage

One year in unopened containers stored between 50 °F (10 °C) and 75° F (24 °C) under dry, ventilated conditions and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

Revision Date: 3/25/2021



GP Wearcoat

Two-Component, Polyurethane, Wear Coat

Physical property	Typical value	Test method
Appearance	Gray	
Solids Content by Volume	100%	ASTM D1644-2001, Method A
Elongation	88%	D412-06ae2 (as per C957M-10)
Hardness	58 Shore D	D2240-05 (as per C836M-10)
Tear Resistance	230 pli	D624-00 (2007)
Tensile Strength	1873 psi	D412-06ae2 (as per C957M-10)
VOC Content (maximum)	0 g/l	ASTM C1250-05

Description

Henry® GP Wearcoat is a 100% solids, two-component, polyurethane coating, fully broadcast with aggregate, to form a flexible, hard wearing, anti-skid, traffic surface.

GP Wearcoat also forms a surface for strong adhesion by mortars, concrete, asphalt, adhesives and sealants.

Features

- Flexible, hard wearing, anti-skid traffic surface
- Cures quickly at low temperatures
- Low odor, solvent free and VOC compliant

Usage

GP Wearcoat is used as a hard-wearing traffic surface for:

- · Parking Decks, Loading Docks, Balconies, Walkways
- Protected Membrane Roofing (PMR)
- Plaza Decks
- Inverted Roof Membrane Assemblies (IRMA)
- Green Roofs (VRA)
- Split Slabs
- Planters
- Terraces

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and TechTalk.

Surface temperature must be at least 5° F above the dew point and rising.

Air and substrate temperatures must be between 40° F and 95° F. Relative humidity must be less than 80%.

Surface Prep: Surfaces to be over-coated must be clean, dry and free of contaminants that would impair adhesion.

If there are any doubts about suitability of a substrate, further advice should be sought from a Henry representative and a small trial area should be applied and tested appropriately.

Product Mixing: GP Wearcoat Parts A & B are pre-measured.

Mix all Part A with all of Part B.

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle.

Mix Ratio by Volume:

- 1. Dispense Part A into a separate, clean, dry mixing pail. Mix for 30 seconds, taking care not to hit the sides.
- 2. Add Part B, taking care not to hit the sides, and mix for a minimum 1 minute.

Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free, homogenous liquid. Scrape out all the material from the mixing pail.

Henry GP Wearcoat

Decant to a new pail and use immediately

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently. Decant newly mixed material into smaller containers or onto substrate and spread to prolong working time

Pot Life @ 68° F: 15 minutes. The working time and viscosity of GP Wearcoat will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Application: GP Wearcoat is applied evenly by notched (3/16") squeegee an back rolled with a heavy-duty roller arm and medium nap (1/2") roller to assist leveling.

When GP Wearcoat becomes less fluid, back roll one more time to ensure it stays on substrate high points.

When **GP Wearcoat** has a sticky, "taffy" like consistency (usually 15-20 minutes @ 68° F), broadcast clean, dry aggregate as specified.

Apply aggregate by shovel or hopper gun, in multiple passes, allowing aggregate to "fall" vertically onto the GP Wearcoat

Application Rate:

- Apply in one coat at a rate of 45-65 sf/gal (150-220 st/ 3.35 gal kit), depending on Henry specification
- Allow for saturation of rollers and brushes

WFT-DFT: Both 24-35 mils, depending on application rate.

Re-coat and Traffic Times after application:

Minimum @ 68° F = 4 hours

Maximum 24 hours. No maximum time when fully broadcast with sand but must be cleaned thoroughly before over coating Colder temperatures will increase this time.

Product Restrictions and Limitations:

Can be rained on after 3 hrs. @68° F Can be walked on after 4 hrs. @68° F Colder temperatures will increase these times

NOTE: Before using **GP Wearcoat**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves and safety goggles with side shields during mixing and application.

Respiratory masks should be worn at all times when adequate ventilation does not exist.

A NIOSH/MSHA (TC-23C-1809), multi gas vapor respirator is acceptable.

Avoid strong concentration of vapor as well as direct contact with skin or eyes.

Uncured resins may be toxic. They may cause allergic reactions or hypersensitivity reactions

Contact with skin – wash immediately with soap and water.

Contact with eyes - rinse immediately with lots of water and seek medical attention.

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

• For Henry System Warranty and Gold Seal Warranty requirements, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Clean-up of tools and equipment may be accomplished by using Acetone or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

Product contents / packaging size

Part A 3 gal / 3.5 gal container Part B .35 gal / 1 gal container

www.henry.com

Storage

One year in unopened containers stored between 50° F and 80° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

www.henry.com



GP Topcoat

Two-Component, Aliphatic, Polyurea Coating

Physical property	Typical value	Test method
Appearance	Mid/Dark Gray, Custom Color	
Solids Content by Volume	100%	ASTM D1644-2001, Method A
Elongation	800%	D412-06ae2 (as per C957M-10)
Hardness	85 Shore A	D2240-05 (as per C836M-10)
Tear Resistance	353 pli	D624-00 (2007)
Tensile Strength	2500 psi	D412-06ae2 (as per C957M-10)
VOC Content (maximum)	0 g/l	ASTM C1250-05

Description

Henry® **GP Topcoat** is a two-component aliphatic polyurea coating used as a colored topcoat. **GP Topcoat** is designed to form an elastic, strong, UV and color stable coating with excellent abrasion resistance.

Features

- Elastic, hard wearing, abrasion resistant
- UV stable and color stable
- · Low odor and VOC compliant
- Can be left exposed to ponded water
- · Chemically resistant

Usage

GP Topcoat is used as a flexible, UV and color stable topcoat for:

- Parking Decks, Loading Docks, Balconies, Walkways, Mechanical rooms
- Exposed membranes, where long-term color stability is required

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification. Surface temperature must be at least 5° F above the dew point and rising. Air and substrate temperatures must be between 40° F and 95° F.

Surface Prep: Surfaces to be over-coated must be clean, dry and free of contaminants that would impair adhesion. If there are any doubts about suitability of a substrate, further advice should be sought from a Henry representative and a small trial area should be applied and tested appropriately.

Product Mixing: GP Topcoat Parts A & B are pre-measured.

Mix all Part A (resin) with all of Part B (hardener).

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle.

Mix Ratio by Volume:

- 1. Dispense Part A into a separate, clean, dry mixing pail. Mix for 30 seconds, taking care not to hit the sides.
- 2. Add Part B, taking care not to hit the sides, and mix for a minimum 1 minute.

Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free, homogenous liquid. Do not mix in an up and down motion.

Scrape out all the material from the mixing pail.

Decant to a new pail and use immediately

Do not mix new material with old, uncured material as this can significantly reduce work times. Use new pails frequently. Decant newly mixed material into smaller containers or onto substrate and spread to prolong working time

Revision Date: 6/29/2021

Pot Life @ 68 F: 15 minutes. The working time and viscosity of GP Topcoat will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Application: GP Topcoat is applied evenly by flat squeegee, roller and brush

After spreading by squeegee, use a heavy-duty roller arm applying moderate pressure to force **GP Topcoat** into aggregate voids The roller sleeve nap will depend on the size of anti-skid aggregate being covered, usually 3/8"

Application Rate: Refer to Dundeq specification

- Pedestrian 5-year traffic system applied in one coat @100sf/gallon (500/5-gal.kit)
- Pedestrian 10-year traffic system applied in two coats @ 100sf/gallon (500sf/5-gal. kit) + 120sf/gallon (600sf/5gal. kit)
- Vehicular light duty areas applied in one coat @80sf/gallon (400sf/5-gal.kit)
- Vehicular medium duty areas applied in two coats @ 100sf/gallon (500sf/5-gal. kit) + 100sf/gallon (500sf/5gal. kit)
- Vehicular heavy duty areas (onto GP Wear Coat and aggregate) applied in one coat @90sf/gallon (450/5-gal.kit)
- As a Topcoat over FX 400 membrane, apply in two coat @150sf/gallon (750sf/5gal. kit) + 150sf/gallon (750sf/5gal. kit)
 Allow for saturation of rollers

WFT-DFT: 12-20 mils, depending on application type and surface profile

Re-coat and Traffic Times after application:

Minimum @ 68° F = 6 hours, and tack-free before re-coating

Maximum 48 hours. If this time is exceeded, wipe with Acetone or MEK and a clean cloth.

Allow solvent to fully evaporate

12 hours before pedestrian traffic @ 68° F

24 hours before vehicular traffic @ 68° F

Colder temperatures will increase these times

Product Restrictions and Limitations:

NOTE: Before using **GP Topcoat**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves and safety goggles with side shields during mixing and application.

Respiratory masks should be worn at all times when adequate ventilation does not exist.

A NIOSH/MSHA (TC-23C-1809), multi gas vapor respirator is acceptable.

Avoid strong concentration of vapor as well as direct contact with skin or eyes.

Uncured resins are corrosive, toxic or both. They may cause allergic reactions or hypersensitivity reactions.

Contact with skin - wash immediately with soap and water.

Contact with eyes – rinse immediately with lots of water and seek medical attention.

Coverage

Application rates should be adjusted to meet each project's specified requirements.

Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

 For Henry System Warranty and Gold Seal Warranty requirements, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Clean-up of tools and equipment may be accomplished by using Acetone or MEK. Read and follow all Health and Safety instructions on SDS. Wash body with soap and water. Ensure all materials are mixed and cured before disposal, in accordance with federal, state, and local regulations. Dispose of all packaging in accordance with federal, state, and local regulations.

Product size/packaging

Part A Resin 4.0 gal/ 5 gal container Part B Hardener 1.0 gal/ 1 gal container

www.henry.com

Storage

One year in unopened containers stored between 60° F and 90° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on the Henry® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

Revision Date: 6/29/2021



PU Topcoat

100% Solids, Two-Component, Aromatic Polyurethane Topcoat

Physical property	Typical value	Test method
Solids Content	100%	ASTM D1644-2001 Method A
VOC Content	0 g/l	C1250-05
Adhesion	>435 psi	C794-10
Tensile Strength	2900psi	D412-06ae2
Hardness	62 Shore A	D2240-05
Abrasion Resistance	40mg loss	C501-84
Elongation	50%	D415-06ae2

Description

Henry® PU Topcoat is a 100% solids, two-component, aromatic polyurethane coating used as a colored topcoat.

Henry PU Topcoat is a non-UV resistant topcoat specifically formulated to provide excellent abrasion and chemical resistance.

Features and benefits

- High abrasion resistance
- Low odor
- No solvents
- Zero VOCs

Usage

Henry PU Topcoat is used as a non-UV resistant colored topcoat for:

- Interior parking decks
- Loading docks
- Walkways
- Mechanical rooms

Application

Site Conditions: All surfaces should be prepared per the approved Henry specification and Tech Talk.

Surface temperature must be at least 5° F above the dew point and rising.

Air and substrate temperatures must be between 50° F and 90° F.

Relative humidity should be less than 80%.

Surface Prep: Surfaces to be over-coated must be firm, dry and load bearing, free of loose and brittle particles, and contaminants that would impair adhesion.

If there are any questions about the suitability of a substrate, further advice should be sought from a Henry Representative and a small trial area should be applied and tested appropriately.

Product Mixing: Henry PU Topcoat Parts A & B are pre-measured.

Mix all of Part A with all of Part B.

They must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with spiral (Jiffy) mixing paddle. Work the mixing paddle around the sides and bottom of the mixing pail to achieve a uniform, streak free homogenous liquid.

Mix Ration by Volume:

- 1. Pour all of Part A into a separate, clean, dry mixing pail taking care not to hit the sides. Pre-mix for 30 seconds.
- 2. Add all of Part B, taking care not to hit the sides.
- 3. Mix for a minimum of two minutes.

Mix all of Part A with all of Part B.

Scrape out all the material from the mixing pail.

Do not mix new material with old, uncured material as this can significantly reduce work times.

Revision Date: 8/31/2020

Henry PU Topcoat

Decant newly mixed material into smaller containers or onto substrate and spread to prolong working time.

Pot Life @ 68° F: 20 minutes

The working time and viscosity of **Henry PU Topcoat** will be influenced by the length of time it is mixed (longer mixing results in shorter pot life), the substrate and ambient temperatures and how quickly it is removed from the mixing pail and spread on the substrate.

Application: Henry PU Topcoat is applied evenly by roller.

Use a heavy-duty roller arm applying moderate pressure to force topcoat into aggregate voids.

The roller sleeve nap will depend on the size of the anti-skid aggregate being covered, usually 3/8"

Application Rate: Apply in one coat at a rate of approximately: 70 sf/gallon (350 sf/5 gal) on a CSP 3-4 profile substrate.

WFT-DFT: 20 mils

Re-coat and Traffic times after application:

Minimum @ 68° F = 6 hours and tack-free before re-coating.

Maximum 48 hours. If this time is exceeded, wipe with MEK and a clean cloth.

Can be trafficked by pedestrians after 24 hours, vehicular traffic after 48 hours @ 68° F. Colder temperatures will increase this time.

Product Restrictions and Limitations: Do not apply too thick, maximum 20 mils WFT.

Thicker coats will cause gassing and air entrapment.

Cure times and color will be affected by humidity and temperatures.

Note: Before using **Henry PU Topcoat**, please refer to Safety Data Sheet (SDS). Ensure the same safe working methods are followed for all persons in the work area. Wear suitable protective clothing, butyl rubber or nitrile gloves and safety goggles with slide shields during mixing and application.

Respiratory masks should be worn at all times when adequate ventilation does not exist.

A NIOSH/MSHA (TC-23C-1809), multi gas vapor respirator is acceptable.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Avoid direct contact with skin or eyes.

Uncured polymers are corrosive, toxic or both.

They may cause allergic reactions or hypersensitivity reactions.

Contact with skins – wash immediately with soap and water.

Contact with eyes – rinse immediately with lots of water and seek medical attention.

Coverage

Application rates should be adjusted to meet each project's specified requirements. Coverage rates are theoretical and do not take into account material loss due to project conditions and working methods.

For Henry System Warranty, refer to appropriate approved Henry specification for application and coverage rate requirements.

Clean-up

Follow all health and safety instructions on Safety Data Sheets (SDS).

Clean tools and equipment with Acetone or MEK.

Ensure all materials is mixed and cured before disposal, in accordance with federal, state and local regulations.

Dispose of all packaging in accordance with federal, state and local regulations.

Wash body with soap and water.

Packaging size

Part A 3.5 gal Part B 1 gal

Storage

www.henry.com

Henry PU Topcoat

One year in original, unopened containers stored between 60° F and 90° F under dry, ventilated conditions, and out of direct sunlight. Storing the material at a higher temperature may reduce its shelf life. Keep in an upright position and do not over stack.

For more information, visit www.henry.com or for technical assistance call us at 800-486-1278. For more information on Henry's® product warranty and liability disclaimer please visit www.henry.com/warranty. Refer to the Safety Data Sheet prior to using this product. The Safety Data Sheet is available at www.henry.com or by emailing Henry® Product Support at productsupport@henry.com or by calling 800-486-1278.

Henry is a registered trademark of Henry Company. Covered by US patent 6,901,712; Canadian patent 2,413,550.

The technical and application information herein is based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use. Henry® Company data sheets are updated on a regular basis; it is the user's responsibility to obtain and to confirm the most recent version. Information contained in this data sheet may change without notice.

Revision Date: 8/31/2020

SAFETY DATA SHEET



Issue Date 28-Apr-2020 Revision Date 28-Apr-2020 Version 1

1. IDENTIFICATION

Product identifier

Product Name GP FLEXCOAT PART A

Other means of identification

Product Code TQ915 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coatings
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier AddressManufacturer AddressHENRY COMPANYHENRY COMPANY

15 Wallsend Dr. 999 N. Pacific Coast Hwy., Suite 800

Scarborough, ON M1E 3X6 El Segundo, CA 90245-2716

Canada Web Site: www.henry.com www.ca.henry.com

Web Site: www.henry.com www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone US and Canada only (toll-free) : 3E Company - 1-866-519-4752 (access code 334832)

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832) Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Material Information System (WHMIS)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction



Appearance viscous Physical state liquid Odor Aromatic

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed. May be harmful in contact with skin. Causes mild skin irritation. Harmful to aquatic life with long lasting effects.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%
Polyurethane prepolymer *	53880-05-0	60 - 100
Propylene carbonate *	108-32-7	5 - 10
Isophorone diisocyanate *	4098-71-9	5 - 10
Titanium dioxide *	13463-67-7	1 - 5

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contactCall a physician immediately. Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least 15 minutes. If symptoms

persist, call a physician.

Skin contact Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If

symptoms persist, call a physician.

Inhalation Immediate medical attention is required. Move victim to fresh air. Administer oxygen if

breathing is difficult. If breathing is irregular or stopped, administer artificial respiration.

Ingestion Call a physician or poison control center immediately. Do NOT induce vomiting. Drink

plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause

allergic skin reaction. May cause redness and tearing of the eyes.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use

personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill with

inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2%

detergent. Add about 10 parts of neutralizer per part of isocyanate, with mixing. Allow

substance to evaporate.

Methods for cleaning up Do not direct water at spill or source of leak. Decontaminate floor with decontamination

solution letting stand for at least 15 minutes.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in

confined areas. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

	Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Г	Isophorone diisocyanate	TWA: 0.005 ppm	-	TWA: 0.005 ppm
	4098-71-9			TWA: 0.045 mg/m ³
				STEL: 0.02 ppm
				STEL: 0.180 mg/m ³
Г	Titanium dioxide	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust	IDLH: 5000 mg/m ³
	13463-67-7	-		TWA: 2.4 mg/m ³ CIB 63 fine
				TWA: 0.3 mg/m ³ CIB 63 ultrafine,
				including engineered nanoscale

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid

Appearance viscous Odor Aromatic

Color pigmented Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available
Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)
Flammability Limit in Air

No information available
No information available
No information available

Upper flammability limit:No information availableLower flammability limit:No information available

Vapor pressure ~0

Vapor density No information available

Relative density 1.05

Water solubility insoluble Reacts with water Solubility in other solvents
Partition coefficient No information available No information available

Dynamic viscosity >250 mPa s

Explosive properties No information available Oxidizing properties No information available

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

Conditions to avoid

Keep from any possible contact with water. Extremes of temperature and direct sunlight. Storage near to reactive materials.

Incompatible materials

Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. May cause sensitization by inhalation. Harmful by

inhalation.

Eye contact Irritating to eyes.

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

May cause irritation.

Ingestion

Based on available data, the classification criteria are not met.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene carbonate 108-32-7	= 29000 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	-
Isophorone diisocyanate 4098-71-9	= 1097 mg/kg (Rat)	1060 - 4780 mg/kg (Rabbit)	= 0.135 mg/L (Rat) 4 h
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms May cause an allergic skin reaction. Redness. Coughing and/ or wheezing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization by inhalation. May cause sensitization by skin contact.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met. This product contains

titanium dioxide which is classified as a possible carcinogen when present as respirable

dust. This is not relevant for this product since it is a liquid.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide	-	Group 2B	-	X
13463-67-7		•		

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure May cause disorder and damage to the. Respiratory system. Eyes. Skin.

STOT - repeated exposureBased on available data, the classification criteria are not met.

Chronic toxicity Repeated or prolonged exposure may cause central nervous system damage. Repeated or

prolonged contact causes sensitization, asthma and eczemas.

Target Organ Effects Respiratory system, Eyes, Skin, Central nervous system, lungs, Lymphatic System.

Aspiration hazardBased on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 2,693.00 mg/kg ATEmix (dermal) 2,050.00 mg/kg ATEmix (inhalation-dust/mist) 1.36 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Propylene carbonate 108-32-7	500: 72 h Desmodesmus subspicatus mg/L EC50	1000: 96 h Cyprinus carpio mg/L LC50 semi-static 5300: 96 h Leuciscus idus mg/L LC50 static	500: 48 h Daphnia magna mg/L EC50
Isophorone diisocyanate 4098-71-9	118.7: 72 h Desmodesmus subspicatus mg/L EC50	1.8: 48 h Leuciscus idus mg/L LC50 static	83.7: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Propylene carbonate 108-32-7	0.48

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDGNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Isophorone diisocyanate - 4098-71-9	1.0
SARA 311/312 Hazard Categories	
Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Isophorone diisocyanate	-	500 lb	-
4098-71-9			

US State Regulations

California Proposition 65

This product contains titanium dioxide which is classified as an IARC 2B carcinogen based on laboratory studies where animals were exposed to titanium dioxide dust. This is not a relevant route of exposure for this product since it is a moist solid material with little to no chance of producing dust

Chemical Name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isophorone diisocyanate 4098-71-9	X	X	X
Titanium dioxide 13463-67-7	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 3 Flammability 1 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 3* Flammability 1 Physical hazards 0 Personal protection X

Chronic Hazard Star Legend *= Chronic Health Hazard

Issue Date28-Apr-2020Revision Date28-Apr-2020

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Issue Date 28-Apr-2020 Revision Date 28-Apr-2020 Version 1

1. IDENTIFICATION

Product identifier

Product Name GP FLEXCOAT PART B

Other means of identification

Product Code TQ916 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coatings
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
HENRY COMPANY
HENRY COMPANY

15 Wallsend Dr. 999 N. Pacific Coast Hwy., Suite 800

Scarborough, ON M1E 3X6 El Segundo, CA 90245-2716

Canada Web Site: www.henry.com www.ca.henry.com

Web Site: www.henry.com www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone US and Canada only (toll-free) : 3E Company - 1-866-519-4752 (access code 334832)

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832) Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Material Information System (WHMIS)

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Warning

Hazard statements

Harmful if swallowed

Causes serious eye irritation

May cause damage to organs through prolonged or repeated exposure



Appearance viscous Physical state liquid Odor Slight Amine

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

Unknown acute toxicity

11% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Polyol blend (non-hazardous) *	Proprietary	30 - 60
Diethyltoluenediamine *	68479-98-1	15 - 40
Benzenamine,	5285-60-9	7 - 13
4,4-methylenebis[N-(1-methylpropyl)- *		
Glycidoxypropyltrimethoxysilane *	2530-83-8	1 - 5
Carbon black *	1333-86-4	0.1 - 1

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice Immediate medical attention is required.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician

immediately.

Skin contact Immediate medical attention is required. Wash off immediately with soap and plenty of

water while removing all contaminated clothes and shoes.

Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial

respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give

anything by mouth to an unconscious person. Drink plenty of water.

Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin

irritation. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO2, sand, earth, water spray or regular foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

spill/leak.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or

tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Cover liquid spill with sand, earth or other non-combustible absorbent material. Use

personal protective equipment as required. Dam up. Take up mechanically, placing in

appropriate containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Use

personal protective equipment as required. Do not breathe

dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of

children.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational **Exposure Guidelines**

exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Carbon black	TWA: 3 mg/m³ inhalable particulate	TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³
1333-86-4	matter		TWA: 3.5 mg/m ³
			TWA: 0.1 mg/m³ Carbon black in
			presence of Polycyclic aromatic
			hydrocarbons PAH

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers

> **Eyewash stations** Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Wear protective gloves and protective clothing. Skin and body protection

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and

clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly

Tag Closed Cup

after handling. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid **Appearance** viscous Odor

Slight Amine Color pigmented Odor threshold No information available

Property Values Remarks • Method

Hq >8 solution (1 %)

Melting point / freezing point

No information available Boiling point / boiling range No information available > 120 °C / 248 °F

Flash point **Evaporation rate** No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:No information availableLower flammability limit:No information availableVapor pressureNo information available

Vapor density >1
Relative density 1.0 - 1.05
Water solubility negligible

Solubility in other solvents
Partition coefficient
Autoignition temperature
Decomposition temperature
No information available
No information available
No information available

Kinematic viscosity > 100 mm2/s

Dynamic viscosity No information available

Explosive properties Not an explosive Oxidizing properties Not applicable

Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

10. STABILITY AND REACTIVITY

@ 40 °C

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Elevated Temperature. Incompatible materials.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Irritating to respiratory system.

Eye contact Corrosive to the eyes and may cause severe damage including blindness.

Skin contact May cause burns. May cause sensitization by skin contact. Harmful in contact with skin.

Ingestion Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyol blend (non-hazardous)	= 3750 mg/kg (Rat) > 2 g/kg (Rat)	-	-
Diethyltoluenediamine 68479-98-1	= 472 mg/kg (Rat) = 485 mg/kg (Rat)	= 700 mg/kg (Rabbit)	-
Glycidoxypropyltrimethoxysilane 2530-83-8	= 22600 µL/kg (Rat) = 7.01 g/kg (Rat)	= 3970 µL/kg(Rabbit)	> 5.3 mg/L (Rat)4 h
Carbon black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

1333-86-4

Information on toxicological effects

Symptoms May cause an allergic skin reaction. Causes skin burns. May cause redness and tearing of

the eyes. Coughing and/ or wheezing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity Risk of serious damage to eyes. Causes burns. **Sensitization** May cause sensitization by skin contact.

Germ cell mutagenicityBased on available data, the classification criteria are not met.

Carcinogenicity This product contains carbon black which is classified as a possible carcinogen when

present as respirable dust. This is not relevant for this product since it is not in a respirable

form.

Chemical Name	ACGIH	IARC	NTP	OSHA
Carbon black	A3	Group 2B	-	X
1333-86-4		·		

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity

STOT - single exposure

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Causes damage to organs through prolonged or repeated exposure.

Chronic toxicity May cause adverse effects on the bone marrow and blood-forming system. May cause

adverse liver effects.

Target Organ Effects blood, Central nervous system, Eyes, kidney, liver, Respiratory system, Skin, Urinary Tract.

Aspiration hazard Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

 ATEmix (oral)
 1,369.00 mg/kg

 ATEmix (dermal)
 2,962.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Carbon black	-	-	5600: 24 h Daphnia magna mg/L
1333-86-4			EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA

UN/ID no UN3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Hazard Class 9
Packing Group III
ERG Code 9L

Special Provisions A97, A158, A197

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Diethyltoluenediamine), 9, III

IMDG

UN/ID no UN3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

 Hazard Class
 9

 Packing Group
 III

 EmS-No
 F-A, S-F

 Special Provisions
 274, 335, 969

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Diethyltoluenediamine), 9, III

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains carbon black which is classified as a possible carcinogen when present as respirable dust. This is not relevant for this product since it is not in a respirable form

Chemical Name	California Proposition 65
Carbon black - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Carbon black	X	X	X
1333-86-4			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 2 Flammability 1 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 2* Flammability 1 Physical hazards 0 Personal protection X

 Issue Date
 28-Apr-2020

 Revision Date
 28-Apr-2020

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

Issue Date 14-Dec-2022 Revision Date 14-Dec-2022 Version 1

1. IDENTIFICATION

Product identifier

Product Name Henry® PU Topcoat - Part A

Other means of identification

Product Code TQ900 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coatings
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier AddressManufacturer AddressHENRY COMPANY CANADAHENRY COMPANY LLC15 Wallsend Dr.336 Cold Stream RoadScarborough, ON M1E 3X6Kimberton, PA 19442

Canada

Web Site: www.henry.com, www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone US and Canada only (toll-free) : 3E Company - 1-866-519-4752 (access code 334832)

Web Site: www.henry.com, www.ca.henry.com

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832) Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Material Information System (WHMIS)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance viscous Physical state liquid Odor Slight

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Causes mild skin irritation.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Polyol blend *	Proprietary	60 - 100
Titanium dioxide *	13463-67-7	1 - 5

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for

use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contact Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial

flushing, remove any contact lenses and continue flushing for at least 15 minutes. If

symptoms persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing

before reuse.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If

symptoms persist, call a physician.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting without

medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.

Self-protection of the first aiderUse personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Stop leak if you can do it without risk. Wash

thoroughly after handling.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth

or other non-combustible absorbent material. Take up mechanically, placing in appropriate

containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use with local exhaust ventilation. Use personal protective equipment as required. Handle

in accordance with good industrial hygiene and safety practice. Wash contaminated

clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep from freezing.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH REL/IDLH
Titanium dioxide	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust	IDLH: 5000 mg/m ³
13463-67-7			TWA: 2.4 mg/m ³ CIB 63 fine
			TWA: 0.3 mg/m ³ CIB 63 ultrafine,
			including engineered nanoscale

NIOSH REL/IDLH Recommended Exposure Limit/Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

@ 25 °C

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid Appearance viscous

AppearanceviscousOdorSlightColorpigmentedOdor thresholdNo information available

Property Values Remarks • Method

pH No information available

Melting point / freezing point

Boiling point / boiling range
Flash point
Evaporation rate
Flammability (solid, gas)
Flammability Limit in Air

No information available
No information available
No information available

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Relative density 1 - 1.1
Water solubility dispersible

Solubility in other solventsNo information availablePartition coefficientNo information availableAutoignition temperatureNo information availableDecomposition temperatureNo information available

Kinematic viscosity > 2500 mm2/s **Dynamic viscosity** No information available

Dynamic viscosityNo information availableExplosive propertiesNot an explosiveOxidizing propertiesNot applicable

Other Information

Softening pointNo information availableMolecular weightNo information availableVOC Content (%)No information availableDensityNo information availableBulk densityNo information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

elevated temperature.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Based on available data, the classification criteria are not met. Inhalation

Eye contact Based on available data, the classification criteria are not met.

Skin contact Based on available data, the classification criteria are not met. Substance may cause slight

skin irritation.

Ingestion Based on available data, the classification criteria are not met.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-

Information on toxicological effects

No information available. **Symptoms**

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Based on available data, the classification criteria are not met. Germ cell mutagenicity Based on available data, the classification criteria are not met.

This product contains titanium dioxide which is classified as a possible carcinogen when Carcinogenicity

present as respirable dust. This is not relevant for this product since it is a liquid.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide	-	Group 2B	-	X
13463-67-7		·		

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Based on available data, the classification criteria are not met. STOT - single exposure Based on available data, the classification criteria are not met. STOT - repeated exposure Based on available data, the classification criteria are not met.

Target Organ Effects lungs, Respiratory system.

Based on available data, the classification criteria are not met. **Aspiration hazard**

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) >5000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDGNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains titanium dioxide which is classified as an IARC 2B carcinogen based on laboratory studies where animals were exposed to titanium dioxide dust. This is not a relevant route of exposure for this product since it is a moist solid material with little to no chance of producing dust

Chemical Name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Titanium dioxide	X	X	X
13463-67-7			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 0 Flammability 1 Instability 0 Physical and Chemical

Properties -

Health hazards 0 Flammability 1 Physical hazards 0 Personal protection X

Issue Date 14-Dec-2022 Revision Date 14-Dec-2022

Revision Note

No information available

Procedure used to derive the classification

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

Issue Date 14-Dec-2022 Revision Date 14-Dec-2022 Version 1

1. IDENTIFICATION

Product identifier

Product Name Henry® PU Topcoat - Part B

Other means of identification

Product Code TQ901 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coatings
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier AddressManufacturer AddressHENRY COMPANY CANADAHENRY COMPANY LLC15 Wallsend Dr.336 Cold Stream RoadScarborough, ON M1E 3X6Kimberton, PA 19442

Canada Web Site: www.henry.com,

www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone US and Canada only (toll-free): 3E Company - 1-866-519-4752 (access code 334832)

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832) Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

2. HAZARDS IDENTIFICATION

Web Site: www.henry.com, www.ca.henry.com

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Material Information System (WHMIS)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure



Appearance viscous Physical state liquid Odor Musty

Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%
Isocyanic acid, polymethylenepolyphenylene ester *	9016-87-9	30 - 60
Benzene, 1,1-methylenebis[isocyanato-, homopolymer *	39310-05-9	30 - 60
4,4-Methylenediphenyl diisocyanate *	101-68-8	10 - 30

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for

use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contact Call a physician immediately. Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least 15 minutes. If symptoms

persist, call a physician.

Skin contact Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If

symptoms persist, call a physician.

Inhalation Immediate medical attention is required. Move victim to fresh air. Administer oxygen if

breathing is difficult. If breathing is irregular or stopped, administer artificial respiration.

Ingestion Call a physician or poison control center immediately. Do NOT induce vomiting. Drink

plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause

allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use

personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill with

inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Add about 10 parts of neutralizer per part of isocyanate, with mixing. Allow

substance to evaporate.

Methods for cleaning up Do not direct water at spill or source of leak. Decontaminate floor with decontamination

solution letting stand for at least 15 minutes.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in

confined areas. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name		ACGIH TLV	OSHA PEL	NIOSH REL/IDLH
4,4-Methylenediphenyl diis	ocyanate	TWA: 0.005 ppm	Ceiling: 0.02 ppm	IDLH: 75 mg/m ³
101-68-8			Ceiling: 0.2 mg/m ³	Ceiling: 0.020 ppm 10 min
				Ceiling: 0.2 mg/m ³ 10 min
				TWA: 0.005 ppm
				TWA: 0.05 mg/m ³

NIOSH REL/IDLH Recommended Exposure Limit/Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Musty

Physical state liquid Appearance viscous

Color brown Odor threshold No information available

Odor

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available
Melting point / freezing point
Boiling point / boiling range
Flash point 198 °C / 388.4 °F
Evaporation rate No information available
Flammability (solid, gas)
Flammability Limit in Air

Upper flammability limit:

Lower flammability limit:

No information available
No information available

Vapor pressure ~0

Vapor density No information available

Relative density 1,234

Water solubility insoluble Reacts with water Solubility in other solvents
Partition coefficient No information available 150-250 mPa s

Explosive properties No information available Oxidizing properties No information available

Other Information

Softening pointNo information availableMolecular weightNo information availableVOC Content (%)No information availableDensityNo information availableBulk densityNo information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

Conditions to avoid

Keep from any possible contact with water. Extremes of temperature and direct sunlight. Storage near to reactive materials.

Incompatible materials

Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. May cause sensitization by inhalation. Harmful by

inhalation.

Eye contact Irritating to eyes.

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Irritating to skin.

Based on available data, the classification criteria are not met. Ingestion

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	= 49 g/kg(Rat)	> 9.4 g/kg(Rabbit) > 9400 mg/kg (Rabbit)	= 490 mg/m³(Rat)4 h
4,4-Methylenediphenyl diisocyanate 101-68-8	= 31600 mg/kg (Rat) = 9200 mg/kg (Rat)	-	= 369 mg/m³ (Rat) 4 h

Information on toxicological effects

May cause an allergic skin reaction. Redness. **Symptoms**

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause sensitization by inhalation. May cause sensitization by skin contact.

Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met

our onlogomony	Dasca on ave	anabic data, tric diagonicat	ion ontona are not met.	
Chemical Name	ACGIH	IARC	NTP	OSHA
Isocyanic acid, polymethylenepolyphenylen e ester 9016-87-9	-	Group 3	-	-
4,4-Methylenediphenyl diisocyanate 101-68-8	<u>-</u>	Group 3	-	-

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure May cause disorder and damage to the. Respiratory system. Eyes. Skin. STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Chronic toxicity Repeated or prolonged exposure may cause central nervous system damage. Repeated or

prolonged contact causes sensitization, asthma and eczemas. Respiratory system, Eyes, Skin, Central nervous system.

Target Organ Effects Aspiration hazard Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 73,500.00 mg/kg ATEmix (dermal) 14,114.10 mg/kg ATEmix (inhalation-dust/mist) 0.63 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDGNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Isocyanic acid, polymethylenepolyphenylene ester - 9016-87-9	1.0
4,4-Methylenediphenyl diisocyanate - 101-68-8	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
4,4-Methylenediphenyl diisocyanate	5000 lb	-	RQ 5000 lb final RQ
101-68-8			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	X	-	-
4,4-Methylenediphenyl diisocyanate 101-68-8	Х	Х	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 3 Flammability 1 Instability 0 Physical and Chemical Properties -

HMIS Health hazards 3* Flammability 1 Physical hazards 0 Personal protection X

Issue Date14-Dec-2022Revision Date14-Dec-2022

Revision Note

No information available

Procedure used to derive the classification

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Issue Date 06-Oct-2019 Revision Date 29-Sep-2019 Version 1

1. IDENTIFICATION

Product identifier

Product Name GP WEARCOAT SG GREY PART A

Other means of identification

Product Code TQ895G Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coatings
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
HENRY COMPANY
HENRY COMPANY

15 Wallsend Dr. 999 N. Pacific Coast Hwy., Suite 800

Scarborough, ON M1E 3X6 El Segundo, CA 90245-2716

Canada Web Site: www.henry.com www.ca.henry.com

Web Site: www.henry.com www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone US and Canada only (toll-free) : 3E Company - 1-866-519-4752 (access code 334832)

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832) Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Material Information System (WHMIS)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance viscous Physical state liquid Odor Slight

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Causes mild skin irritation.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Polyol blend *	Proprietary	60 - 100

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for

use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contact Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial

flushing, remove any contact lenses and continue flushing for at least 15 minutes. If

symptoms persist, call a physician.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. If symptoms persist, call a physician. Wash contaminated clothing

before reuse.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If

symptoms persist, call a physician.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting without

medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.

Self-protection of the first aiderUse personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Stop leak if you can do it without risk. Wash

thoroughly after handling.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth

or other non-combustible absorbent material. Take up mechanically, placing in appropriate

containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use with local exhaust ventilation. Use personal protective equipment as required. Handle

in accordance with good industrial hygiene and safety practice. Wash contaminated

clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep in a dry, cool and well-ventilated place. Keep from freezing.

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid viscous **Appearance**

Odor Slight Color pigmented **Odor threshold** No information available

Property Values Remarks • Method

No information available pН Melting point / freezing point No information available Boiling point / boiling range No information available Flash point > 200 °C / 392 °F **Evaporation rate** No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available Vapor pressure No information available Vapor density No information available

Relative density 1 - 1.1Water solubility dispersible

Solubility in other solvents No information available Partition coefficient No information available **Autoignition temperature** No information available **Decomposition temperature** No information available

Kinematic viscosity > 2500 mm2/s

Dynamic viscosity No information available Not an explosive **Explosive properties**

Oxidizing properties Not applicable

Other Information

Softening point No information available Molecular weight No information available **VOC Content (%)** No information available **Density** No information available **Bulk density** No information available

10. STABILITY AND REACTIVITY

@ 25 °C

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

elevated temperature.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Based on available data, the classification criteria are not met.

Eye contact Based on available data, the classification criteria are not met.

Skin contact Based on available data, the classification criteria are not met. Substance may cause slight

skin irritation.

Ingestion Based on available data, the classification criteria are not met.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) >5000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

100 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated

IATAIMDGNot regulatedNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 0 Flammability 1 Instability 0 Physical and Chemical

Properties -

Health hazards 0 Flammability 1 Physical hazards 0 Personal protection X

Issue Date06-Oct-2019Revision Date29-Sep-2019

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET



Issue Date 05-Oct-2019 Revision Date 29-Sep-2019 Version 1

1. IDENTIFICATION

Product identifier

Product Name GP WEARCOAT PART B

Other means of identification

Product Code TQ894 Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Industrial Coatings
Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier AddressManufacturer AddressHENRY COMPANYHENRY COMPANY

15 Wallsend Dr. 999 N. Pacific Coast Hwy., Suite 800

Scarborough, ON M1E 3X6 El Segundo, CA 90245-2716

Canada Web Site: www.henry.com www.ca.henry.com

Web Site: www.henry.com www.ca.henry.com

Emergency telephone number

Company Phone Number 800-486-1278

Emergency Telephone US and Canada only (toll-free) : 3E Company - 1-866-519-4752 (access code 334832)

US/Canada, all other countries: 3E Company - +1-760-476-3962 (access code 334832) Mexico (additional contact option): 3E Company - +52 55 41696225 (Code 334832)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canadian Workplace Hazardous Material Information System (WHMIS)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Danger

Hazard statements

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure



Appearance viscous Physical state liquid Odor Musty

Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

If skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable.

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%
Isocyanic acid, polymethylenepolyphenylene ester *	9016-87-9	30 - 60
Benzene, 1,1-methylenebis[isocyanato-,	39310-05-9	30 - 60

homopolymer *		
4,4-Methylenediphenyl diisocyanate *	101-68-8	10 - 30

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for

use or safety data sheet if possible). If symptoms persist, call a physician.

Eye contact Call a physician immediately. Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least 15 minutes. If symptoms

persist, call a physician.

Skin contact Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If

symptoms persist, call a physician.

Inhalation Immediate medical attention is required. Move victim to fresh air. Administer oxygen if

breathing is difficult. If breathing is irregular or stopped, administer artificial respiration.

Ingestion Call a physician or poison control center immediately. Do NOT induce vomiting. Drink

plenty of water. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause

allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Use

personal protective equipment as required.

Environmental precautions

Revision Date 29-Sep-2019

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do

not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for containment If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill with

inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Add about 10 parts of neutralizer per part of isocyanate, with mixing. Allow

substance to evaporate.

Methods for cleaning upDo not direct water at spill or source of leak. Decontaminate floor with decontamination

solution letting stand for at least 15 minutes.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Ensure adequate ventilation, especially in

confined areas. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
4,4-Methylenediphenyl diisocyanate	TWA: 0.005 ppm	Ceiling: 0.02 ppm	IDLH: 75 mg/m ³
101-68-8		Ceiling: 0.2 mg/m ³	Ceiling: 0.020 ppm 10 min
			Ceiling: 0.2 mg/m ³ 10 min
			TWA: 0.005 ppm
			TWA: 0.05 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Musty

Information on basic physical and chemical properties

Physical state liquid **Appearance** viscous

Color brown Odor threshold No information available

Odor

Property Values Remarks • Method

No information available Melting point / freezing point No information available No information available Boiling point / boiling range 198 °C / 388.4 °F Flash point No information available **Evaporation rate** Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit: No information available Lower flammability limit: No information available

Vapor pressure ~٨

Vapor density No information available

Relative density 1.234

Water solubility insoluble Reacts with water Solubility in other solvents No information available **Partition coefficient** No information available No information available Autoignition temperature **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** 150-250 mPa s

Explosive properties No information available **Oxidizing properties** No information available

Other Information

Softening point No information available No information available Molecular weight **VOC Content (%)** No information available Density No information available **Bulk density** No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

Conditions to avoid

Keep from any possible contact with water. Extremes of temperature and direct sunlight. Storage near to reactive materials.

Incompatible materials

Water. Alcohols. Strong bases. Strong oxidizing agents. Finely powdered metals.

Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. May cause sensitization by inhalation. Harmful by

inhalation.

Eye contact Irritating to eyes.

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Irritating to skin.

Ingestion Based on available data, the classification criteria are not met.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	= 49 g/kg(Rat)	> 9.4 g/kg(Rabbit)> 9400 mg/kg (Rabbit)	= 490 mg/m³(Rat)4 h
4,4-Methylenediphenyl diisocyanate 101-68-8	= 31600 mg/kg (Rat) = 9200 mg/kg (Rat)	-	= 369 mg/m³ (Rat) 4 h

Information on toxicological effects

Symptoms May cause an allergic skin reaction. Redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

May cause sensitization by inhalation. May cause sensitization by skin contact. Sensitization

Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isocyanic acid, polymethylenepolyphenylen e ester 9016-87-9	-	Group 3	-	-
4,4-Methylenediphenyl diisocyanate 101-68-8	-	Group 3	-	-

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Not classifiable as a human carcinogen

Based on available data, the classification criteria are not met. Reproductive toxicity

STOT - single exposure May cause disorder and damage to the. Respiratory system. Eyes. Skin. STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Chronic toxicity Repeated or prolonged exposure may cause central nervous system damage. Repeated or

prolonged contact causes sensitization, asthma and eczemas.

Target Organ Effects Respiratory system, Eyes, Skin, Central nervous system. **Aspiration hazard** Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 73,500.00 mg/kg **ATEmix (dermal)** 14,114.10 mg/kg 0.63 mg/l

ATEmix (inhalation-dust/mist)

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOTNot regulatedTDGNot regulatedIATANot regulatedIMDGNot regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %	
Isocyanic acid, polymethylenepolyphenylene ester - 9016-87-9	1.0	
4,4-Methylenediphenyl diisocyanate - 101-68-8	1.0	

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

Revision Date 29-Sep-2019

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
4,4-Methylenediphenyl diisocyanate	5000 lb	-	RQ 5000 lb final RQ
101-68-8			RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	X	-	<u>-</u>
4,4-Methylenediphenyl diisocyanate 101-68-8	Х	X	Х

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 3 Flammability 1 Instability 0 Physical and Chemical Properties -

HMIS Health hazards 3* Flammability 1 Physical hazards 0 Personal protection X

Issue Date05-Oct-2019Revision Date29-Sep-2019

Revision Note

No information available

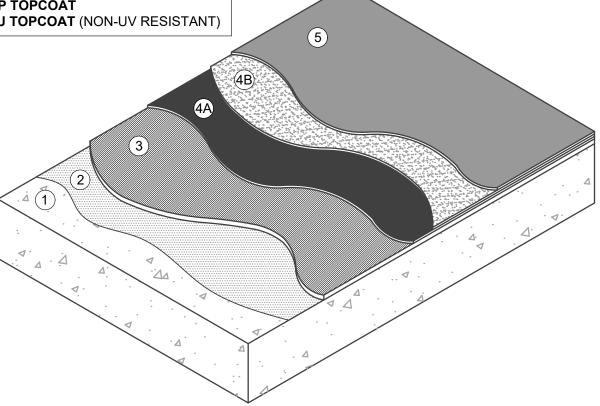
Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

DUNDEQ SYSTEM FULL SEED AND LOCK TRAFFIC COATING SEQUENCE OF INSTALLATION

- (1) DECK/SUBSTRATE AS SPECIFIED
- PRIMER (SEE NOTES #2 AND #3)
- (3) BASE COAT:
 - HENRY DUNDEQ GP FLEXCOAT (22 MILS)
- (4) WEAR COAT:
 - 4A HENRY GP WEARCOAT (30 MILS)
 - 4B DRY SILICA SAND (SEE NOTE #4)
- (5) TOP COAT (20 MILS):
 - **HENRY GP TOPCOAT**
 - **HENRY PU TOPCOAT** (NON-UV RESISTANT)



NOTES:

- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER. 2.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE. HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR 4. NJ0-NJ00).
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION FOR RECOMMENDED INSTALLATION PROCEDURES.



DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION **DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING**

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR

SYSTEM DETAIL

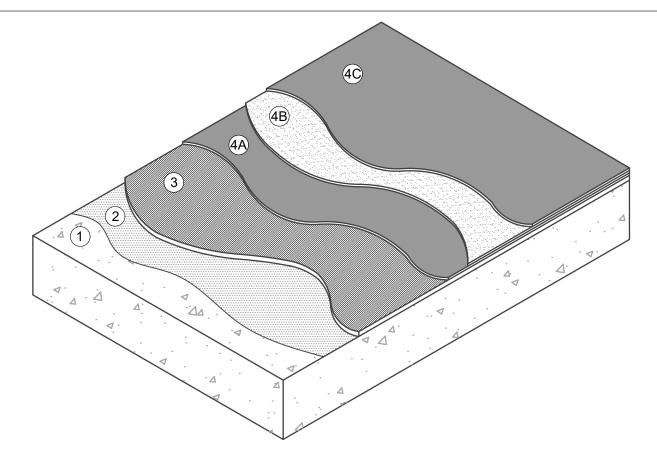
FULL SEED AND LOCK PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS SCALE: N.T.S.

04-10-2020

DUNDEQ-A1

DUNDEQ SYSTEM FOR VEHICULAR AND PEDESTRIAN TRAFFIC COATINGS PARTIAL SEED AND LOCK TRAFFIC COATING - SEQUENCE OF INSTALLATION

- (1) DECK/SUBSTRATE AS SPECIFIED
- (2) PRIMER (SEE NOTES #2 AND #3)
- (3) BASE COAT:
 - HENRY DUNDEQ GP FLEXCOAT (22 MILS)
- (4A) TOP COAT (20 MILS):
 - HENRY GP TOPCOAT
 - HENRY PU TOPCOAT (NON-UV RESISTANT)
- (4B) DRY SILICA SAND (SEE NOTE #4)
- (4C) TOP COAT (10 MILS):
 - HENRY GP TOPCOAT
 - HENRY PU TOPCOAT (NON-UV RESISTANT)



NOTES:

- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY **DUNDEQ** SYSTEM STANDARD PRIMERS: **HENRY LV PRIMER** AND **HENRY LVXL PRIMER**.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 6. REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION FOR RECOMMENDED INSTALLATION PROCEDURES.



DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

DUNDER SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR

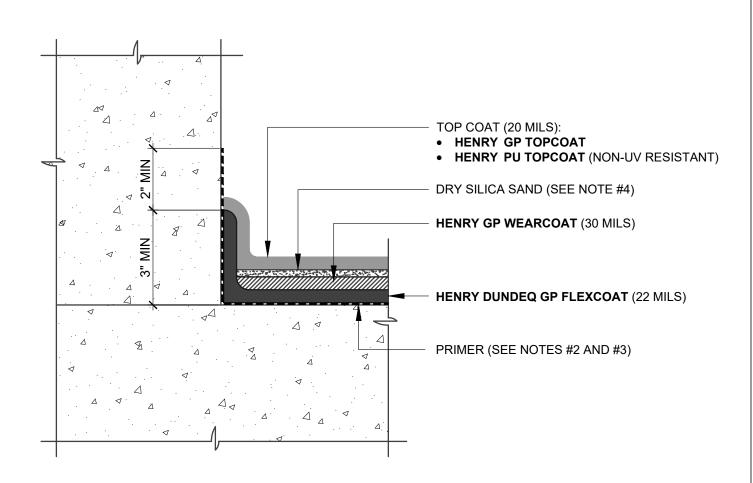
SYSTEM DETAIL

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-A2



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND **DUNDEQ** SYSTEM APPLICATION IN ACCORDANCE WITH HENRY **DUNDEQ** SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 7. REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

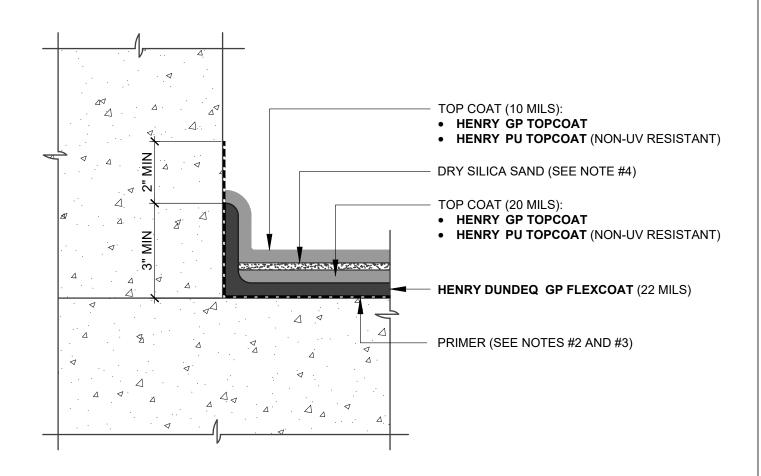
CURB FLASHING

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-C1



- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND DUNDEQ SYSTEM APPLICATION IN ACCORDANCE WITH HENRY DUNDEQ SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION AND DUNDEQ SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

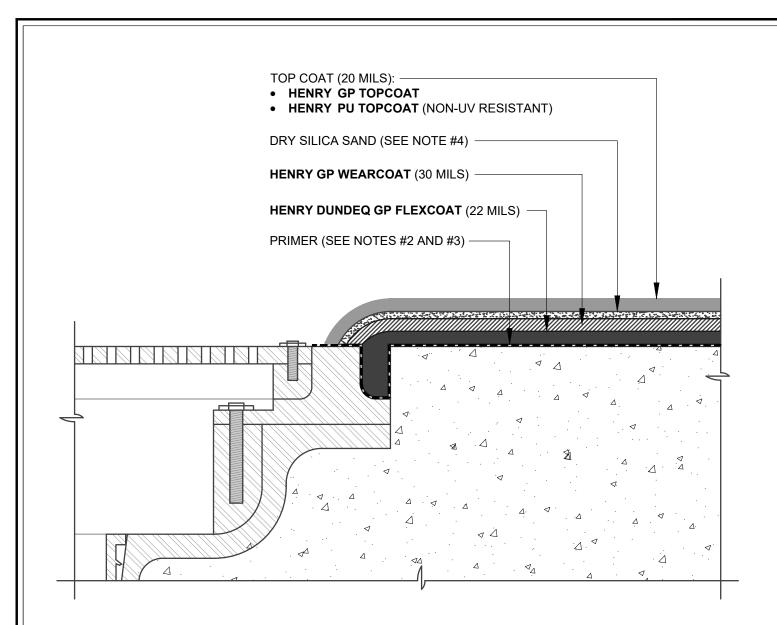
DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

CURB FLASHING

PARTIAL SEED AND LOCK PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS SCALE: N.T.S.

04-10-2020

DUNDEQ-C2



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION AND DUNDEQ SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

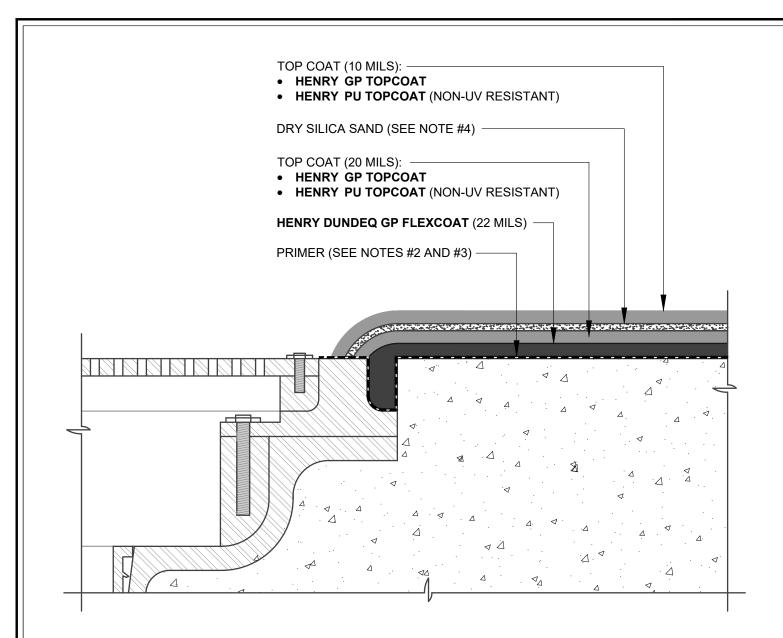
DRAIN

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-D1



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION AND DUNDEQ SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



El Segundo, CA 90245

800-486-1278 • www.henry.com

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

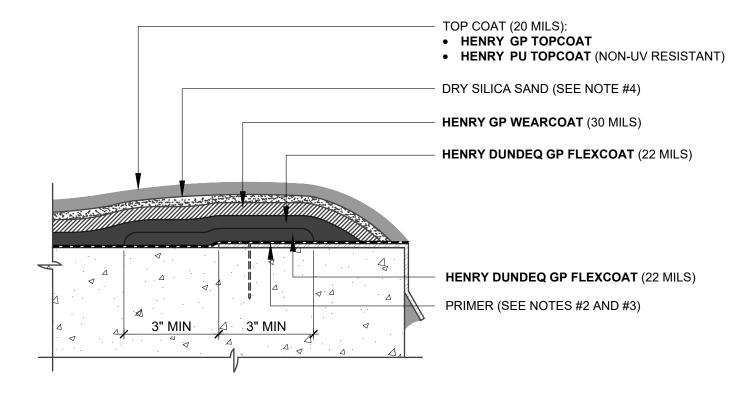
DRAIN

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-D2



- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. MECHANICALLY ATTACH METAL FLASHING, FLUSH WITH SUBSTRATE, PER METAL FLASHING MANUFACTURER REQUIREMENTS.
- 6. DO NOT INSTALL DUNDEQ SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



El Segundo, CA 90245

800-486-1278 • www.henry.com

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

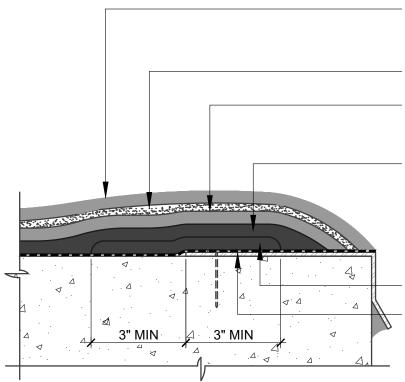
BALCONY EDGE

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-E1



TOP COAT (10 MILS):

- HENRY GP TOPCOAT
- HENRY PU TOPCOAT (NON-UV RESISTANT)

DRY SILICA SAND (SEE NOTE #4)

TOP COAT (20 MILS):

- HENRY GP TOPCOAT
- HENRY PU TOPCOAT (NON-UV RESISTANT)

HENRY DUNDEQ GP FLEXCOAT (22 MILS)

HENRY DUNDEQ GP FLEXCOAT (22 MILS)

PRIMER (SEE NOTES #2 AND #3)

NOTES:

- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- MECHANICALLY ATTACH METAL FLASHING, FLUSH WITH SUBSTRATE, PER METAL FLASHING MANUFACTURER REQUIREMENTS.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

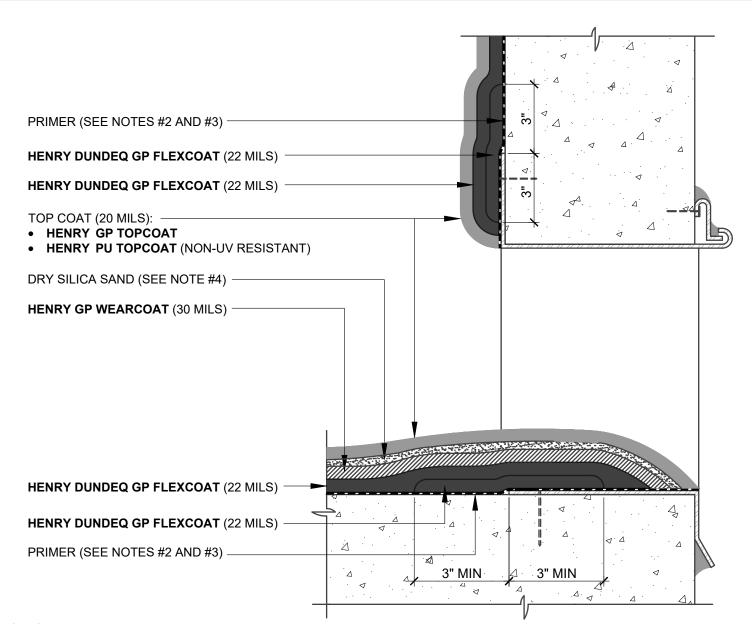
BALCONY EDGE

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-E2



- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. MECHANICALLY ATTACH SCUPPER, FLUSH WITH SUBSTRATE, PER SCUPPER MANUFACTURER REQUIREMENTS.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

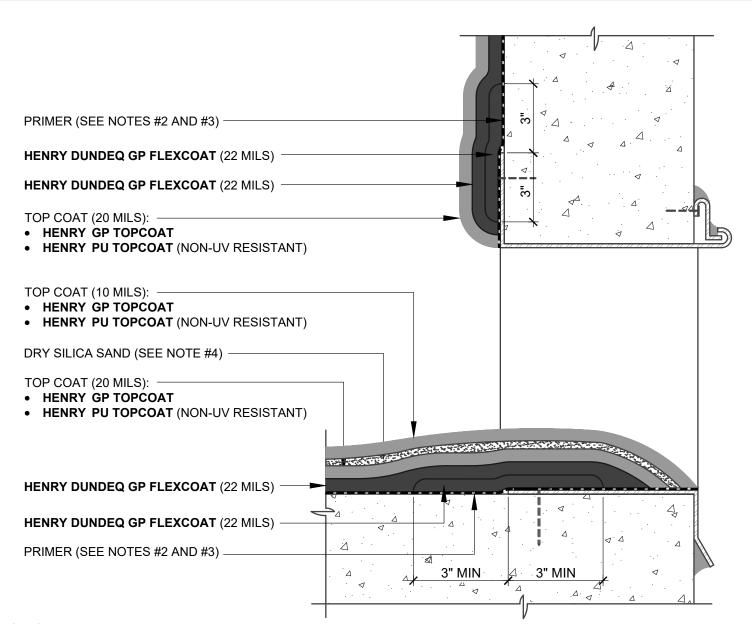
SCUPPER

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-E3



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. MECHANICALLY ATTACH SCUPPER, FLUSH WITH SUBSTRATE, PER SCUPPER MANUFACTURER REQUIREMENTS.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

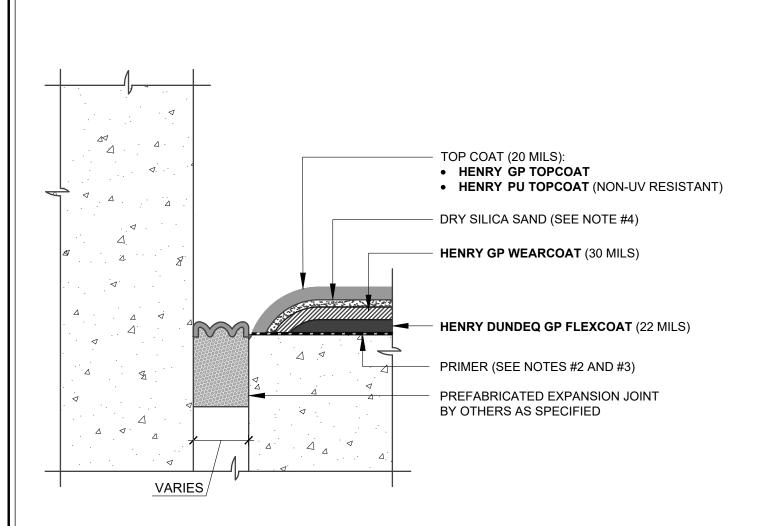
SCUPPER

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-E4



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 6. EXPANSION JOINT MANUFACTURED AND INSTALLED BY OTHERS AS SPECIFIED. CONTACT HENRY FOR PROJECT SPECIFIC COORDINATION OF TRAFFIC COATING WITH EXPANSION JOINT.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

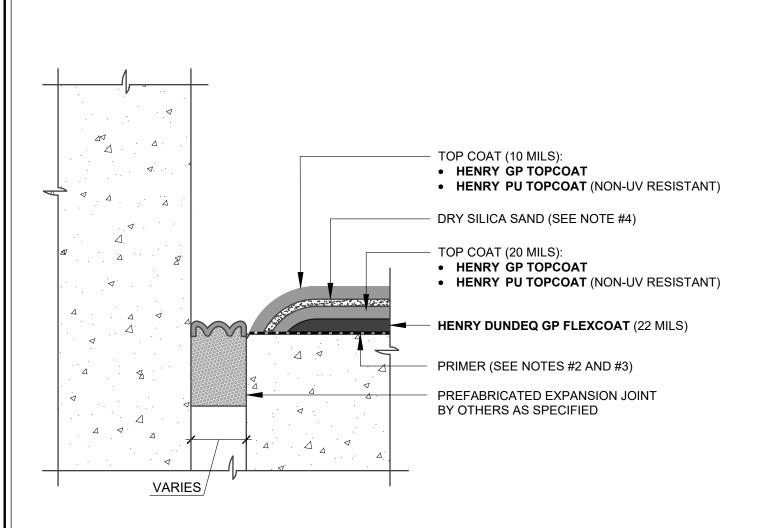
EXPANSION JOINT

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-EJ1



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 6. EXPANSION JOINT MANUFACTURED AND INSTALLED BY OTHERS AS SPECIFIED. CONTACT HENRY FOR PROJECT SPECIFIC COORDINATION OF TRAFFIC COATING WITH EXPANSION JOINT.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

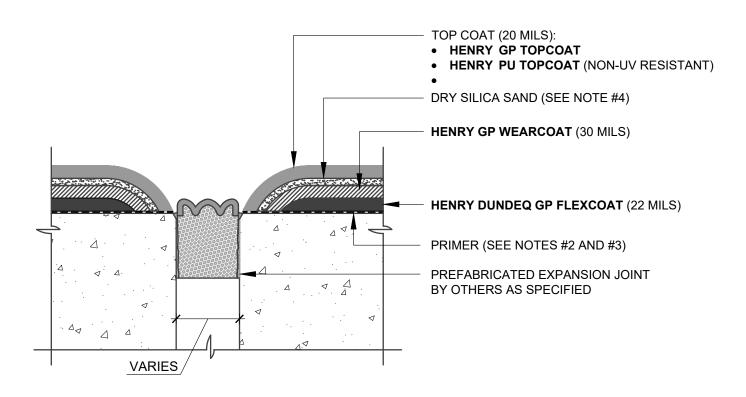
EXPANSION JOINT

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-EJ2



- DETAIL SHOWS HENRY DUNDEQ SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- EXPANSION JOINT MANUFACTURED AND INSTALLED BY OTHERS AS SPECIFIED. CONTACT HENRY FOR PROJECT SPECIFIC COORDINATION OF TRAFFIC COATING WITH EXPANSION JOINT.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION AND DUNDEQ SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

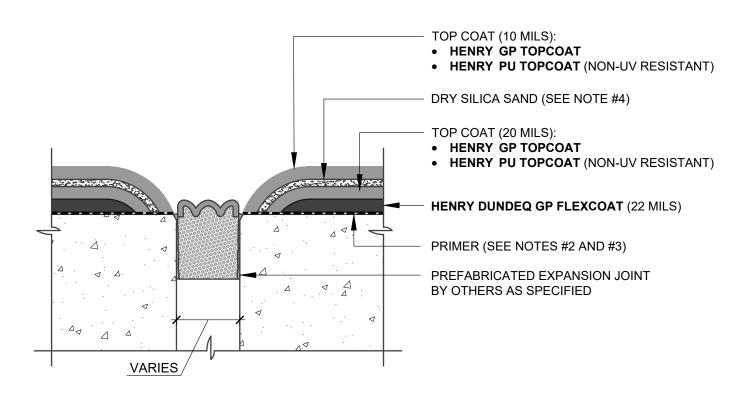
DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

EXPANSION JOINT

FULL SEED AND LOCK PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS SCALE: N.T.S.

04-10-2020

DUNDEQ-EJ3



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 6. EXPANSION JOINT MANUFACTURED AND INSTALLED BY OTHERS AS SPECIFIED. CONTACT HENRY FOR PROJECT SPECIFIC COORDINATION OF TRAFFIC COATING WITH EXPANSION JOINT.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

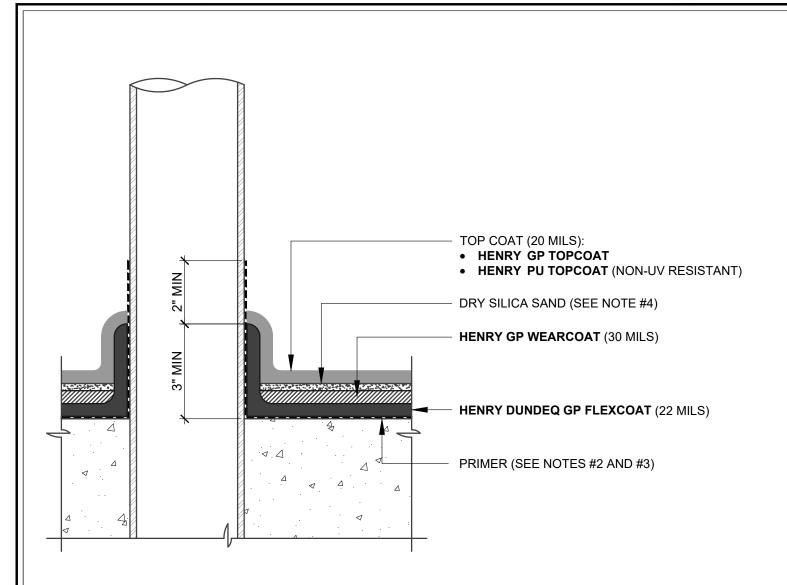
EXPANSION JOINT

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-EJ4



- DETAIL SHOWS HENRY DUNDEQ SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND **DUNDEQ** SYSTEM APPLICATION IN ACCORDANCE WITH HENRY **DUNDEQ** SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

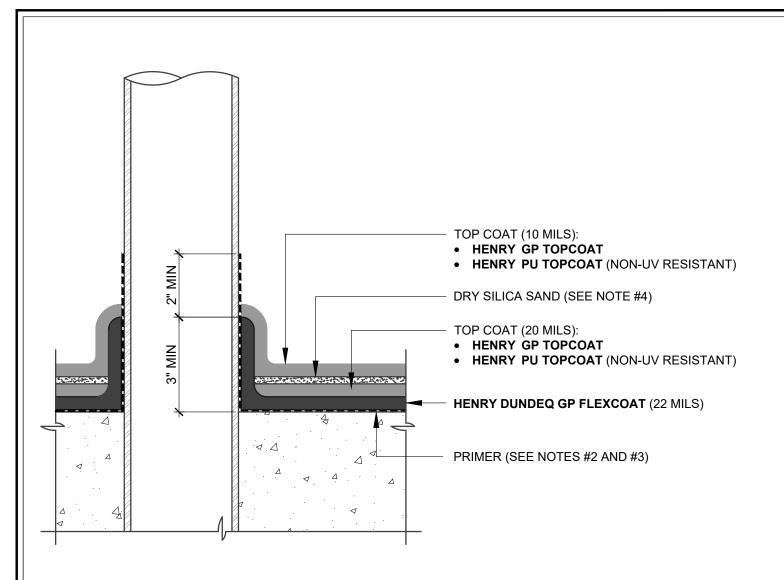
PIPE PENETRATION

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-P1



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND **DUNDEQ** SYSTEM APPLICATION IN ACCORDANCE WITH HENRY **DUNDEQ** SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 7. REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

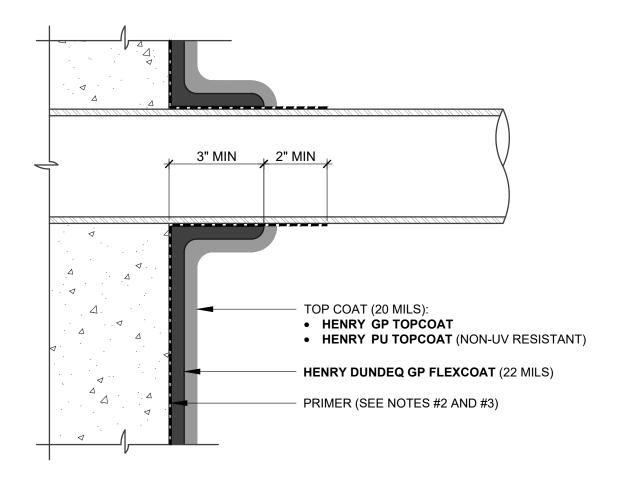
PIPE PENETRATION

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-P2



- DETAIL SHOWS HENRY DUNDEQ SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND DUNDEQ SYSTEM APPLICATION IN ACCORDANCE WITH HENRY **DUNDEQ** SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION AND DUNDEQ SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

PIPE PENETRATION

FULL SEED AND LOCK

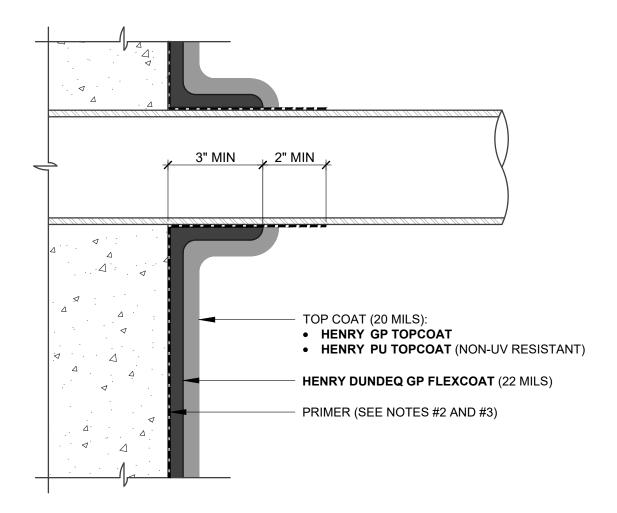
SCALE: N.T.S.

04-10-2020

DUNDEQ-P3

999 N. Pacific Coast Highway, Suite 800 El Segundo, CA 90245 800-486-1278 • www.henry.com

PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND **DUNDEQ** SYSTEM APPLICATION IN ACCORDANCE WITH HENRY **DUNDEQ** SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 7. REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

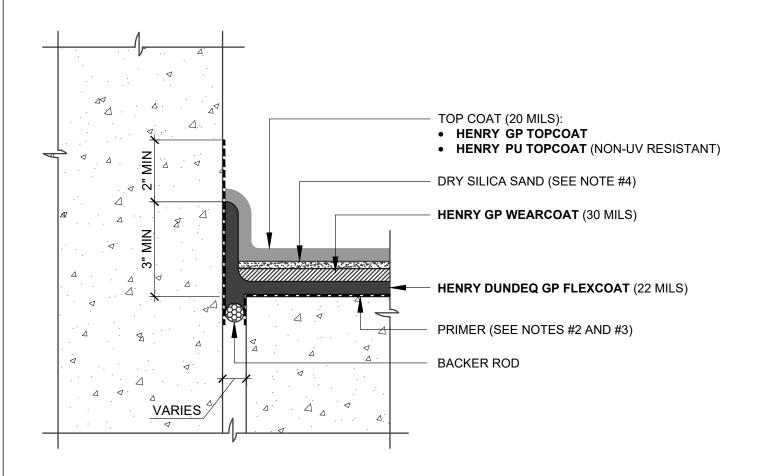
PIPE PENETRATION

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-P4



- 1. DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY **DUNDEQ** SYSTEM STANDARD PRIMERS: **HENRY LV PRIMER** AND **HENRY LVXL PRIMER**.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. REMOVE EXCESS PRIMER FROM GAP PRIOR TO APPLYING HENRY DUNDEQ GP FLEXCOAT.
- PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND DUNDEQ SYSTEM APPLICATION IN ACCORDANCE WITH HENRY DUNDEQ SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- 7. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

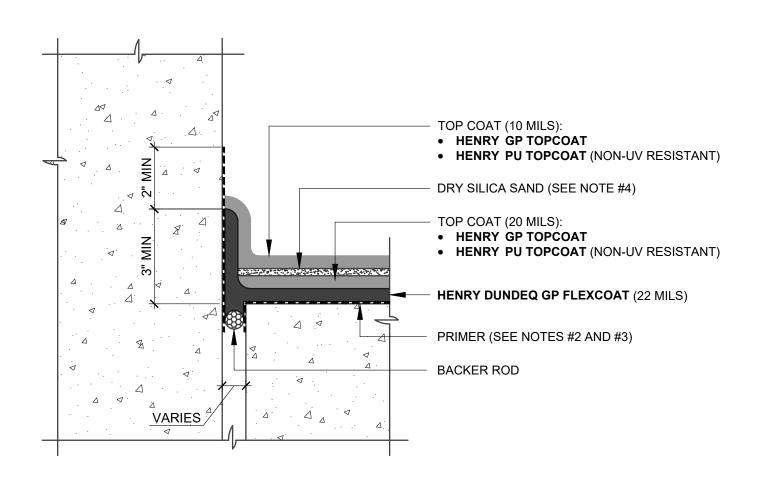
NON-MOVING JOINT

FULL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-S1



- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. REMOVE EXCESS PRIMER FROM GAP PRIOR TO APPLYING HENRY DUNDEQ GP FLEXCOAT.
- PREPARE AND PRIME VERTICAL SUBSTRATES A MINIMUM 2" BEYOND DUNDEQ SYSTEM APPLICATION IN ACCORDANCE WITH HENRY DUNDEQ SYSTEM SUBSTRATE PREPARATION GUIDELINES.
- 7. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- 8. REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

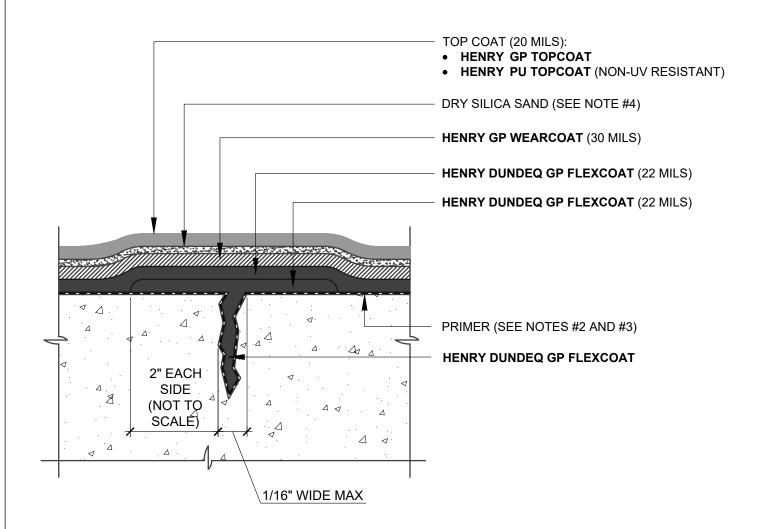
NON-MOVING JOINT

PARTIAL SEED AND LOCK
PEDESTRIAN AND VEHICULAR TRAFFIC COATINGS

SCALE: N.T.S.

04-10-2020

DUNDEQ-S2



- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- REMOVE EXCESS PRIMER FROM CRACK PRIOR TO APPLYING HENRY DUNDEQ GP FLEXCOAT.
- 6. DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

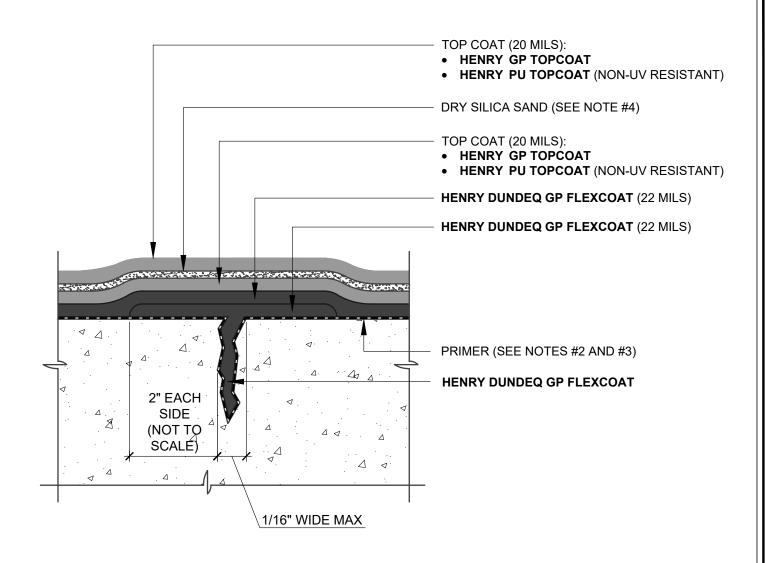
STRUCTURAL CRACKS

FULL SEED AND LOCK TRAFFIC COATING CRACKS UP TO 1/16" WIDE MAXIMUM

SCALE: N.T.S.

04-10-2020

DUNDEQ-SC1



- DETAIL SHOWS HENRY **DUNDEQ** SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER. 2.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. REMOVE EXCESS PRIMER FROM CRACK PRIOR TO APPLYING HENRY DUNDEQ GP FLEXCOAT.
- DO NOT INSTALL **DUNDEQ** SYSTEM BEYOND PRIMED SURFACES.
- REFER TO DUNDEQ SYSTEM GUIDE SPECIFICATION AND DUNDEQ SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

STRUCTURAL CRACKS

CRACKS UP TO 1/16" WIDE MAXIMUM

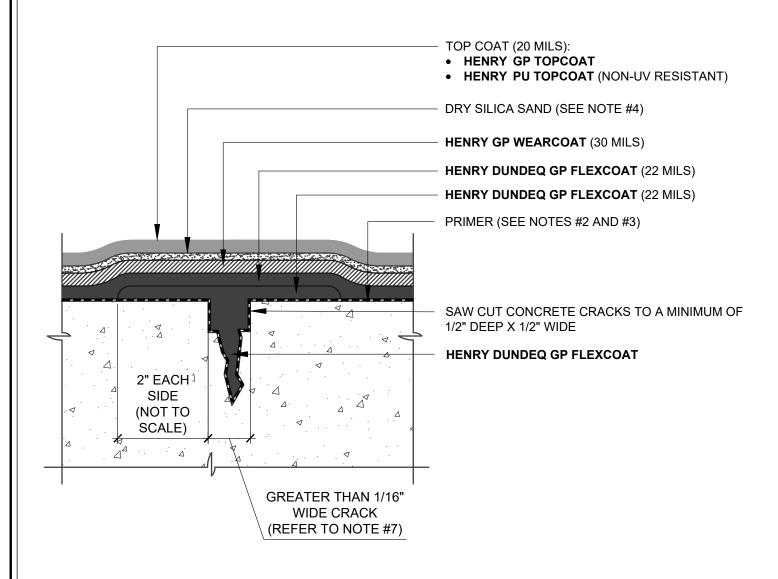
SCALE: N.T.S.

04-10-2020

DUNDEQ-SC2

999 N. Pacific Coast Highway, Suite 800 El Segundo, CA 90245 800-486-1278 • www.henry.com

PARTIAL SEED AND LOCK TRAFFIC COATING



- DETAIL SHOWS HENRY DUNDEQ SYSTEM FULL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- 2. HENRY **DUNDEQ** SYSTEM STANDARD PRIMERS: **HENRY LV PRIMER** AND **HENRY LVXL PRIMER.**
- 3. OTHER RECOMMENDED PRIMERS INCLUDE: **HENRY ST PRIMER** AND AGGREGATE, **HENRY STXL PRIMER** AND AGGREGATE, **PUMADEQ PRIMER 20** AND AGGREGATE OR **HENRY GC EPOXY PRIMER**. REFER TO THE **DUNDEQ** SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. FULLY BROADCAST, TO REJECTION, DRY SILICA SAND INTO WET WEAR COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. REMOVE EXCESS PRIMER FROM CRACK PRIOR TO APPLYING HENRY DUNDEQ GP FLEXCOAT.
- 6. DO NOT INSTALL DUNDEQ SYSTEM BEYOND PRIMED SURFACES.
- 7. CRACKS GREATER THAN 1/8" WIDE ARE CONSIDERED EXPANSION JOINTS. REFER TO EXPANSION JOINT DETAILS.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

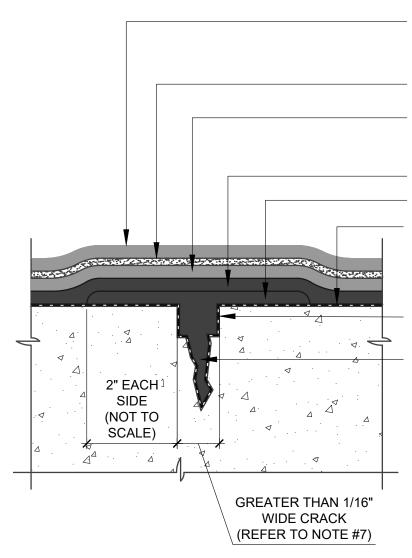
STRUCTURAL CRACKS

FULL SEED AND LOCK TRAFFIC COATING CRACKS GREATER THAN 1/16" WIDE

SCALE: N.T.S.

04-10-2020

DUNDEQ-SC3



TOP COAT (20 MILS):

- HENRY GP TOPCOAT
- HENRY PU TOPCOAT (NON-UV RESISTANT)

DRY SILICA SAND (SEE NOTE #4)

TOP COAT (20 MILS):

- HENRY GP TOPCOAT
- HENRY PU TOPCOAT (NON-UV RESISTANT)

HENRY DUNDEQ GP FLEXCOAT (22 MILS)

HENRY DUNDEQ GP FLEXCOAT (22 MILS)

PRIMER (SEE NOTES #2 AND #3)

SAW CUT CONCRETE CRACKS TO A MINIMUM OF 1/2" DEEP X 1/2" WIDE

HENRY DUNDEQ GP FLEXCOAT

NOTES:

- DETAIL SHOWS HENRY DUNDEQ SYSTEM PARTIAL SEED AND LOCK TRAFFIC COATING. SUBSTRATE SHOWN IS FOR REFERENCE ONLY. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET FOR AUTHORIZED SUBSTRATES.
- HENRY DUNDEQ SYSTEM STANDARD PRIMERS: HENRY LV PRIMER AND HENRY LVXL PRIMER.
- OTHER RECOMMENDED PRIMERS INCLUDE: HENRY ST PRIMER AND AGGREGATE, HENRY STXL PRIMER AND
 AGGREGATE, PUMADEQ PRIMER 20 AND AGGREGATE OR HENRY GC EPOXY PRIMER. REFER TO THE DUNDEQ
 SYSTEM SUBSTRATE PRIMER GUIDELINES TECH-TALK BULLETIN FOR APPLICATION RECOMMENDATIONS.
- 4. PARTIALLY BROADCAST DRY SILICA SAND INTO FIRST LAYER OF WET TOP COAT (SIEVE SIZE: #20-50, #12 SILICA OR NJ0-NJ00).
- 5. REMOVE EXCESS PRIMER FROM CRACK PRIOR TO APPLYING HENRY DUNDEQ GP FLEXCOAT.
- 6. DO NOT INSTALL DUNDEQ SYSTEM BEYOND PRIMED SURFACES.
- 7. CRACKS GREATER THAN 1/8" WIDE ARE CONSIDERED EXPANSION JOINTS. REFER TO EXPANSION JOINT DETAILS.
- REFER TO **DUNDEQ** SYSTEM GUIDE SPECIFICATION AND **DUNDEQ** SYSTEM DETAILS FOR RECOMMENDED INSTALLATION PROCEDURES.



MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

DUNDEQ SYSTEM - PEDESTRIAN/VEHICULAR TRAFFIC COATING

NON-MOVING JOINT

PARTIAL SEED AND LOCK TRAFFIC COATING CRACKS GREATER THAN 1/16" WIDE

SCALE: N.T.S.

04-10-2020

DUNDEQ-SC4

Warranty #: SAMPLE Issued:

Expiration:

HENRY COMPANY ("HENRY") 5 YEAR EXTENDED MATERIAL WARRANTY DUNDEQ™ PEDESTRIAN / BALCONY TRAFFIC ("PRODUCT")

Building Name: Building Location:

Building OWNER: ("OWNER")

Date Product(s) Installation Completed:

Contractor: Square Footage:

What This Limited Warranty Covers:

Commencing with the date of completion of installation of the Product(s) and continuing for the duration of this Warranty, if manufacturing defects in the Product(s) cause the Product(s) to not perform in conformance with the Product(s) label or tech data sheet, as published on www.henry.com at time of warranty issuance, or for its intended application, then HENRY at its sole option will, subject to the following section (What This Warranty Does Not Cover), either (1) refund OWNER's original purchase price for the Product(s) prorated by the unused portion of the warranty term; or (2) provide the amount of Product(s) necessary to make repairs. Under option (1), during the first year after installation of the Product(s), HENRY will refund OWNER's purchase price for the Product(s), exclusive of installation cost and minus any proration and costs previously incurred by HENRY for the replacement of Product(s) under this Warranty. After the first year, the purchase price to be refunded will be prorated by the remaining number of years of the Warranty term, minus any cost previously incurred by HENRY for the replacement of Product(s) under this Warranty.

Decisions as to the extent of repair or replacement required will be made solely by HENRY. The opinion of HENRY with respect to this matter shall be final. The remedy under this Warranty is available only for that portion of the Product(s) exhibiting defects at the time of the warranty claim. The replacement Product(s) as well as any remaining original Product(s) will be warranted only for the original warranty period. This limited warranty applies only to Product(s) used for an application specified by HENRY for the Product(s) and applied in strict accordance with HENRY published specifications, as published on www.henry.com in effect at the time of application. IF PRODUCT(S) IS USED FOR OTHER THAN A HENRY SPECIFIED APPLICATION, MISUSED OR ABUSED, IT IS SOLD AS IS AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

What This Warranty Does Not Cover:

This Warranty warrants that the Product(s) will be free from manufacturing defects which affect the ability of the Product(s) to perform in conformance with the Product(s) label or tech data sheet for its intended application during the Warranty Period; it is not a warranty that the Product(s) will never leak or age or to undertake responsibilities, liabilities or obligations other than those specifically identified in the preceding section.

The Contractor who installs the Product(s) is not a representative, agent or employee of HENRY. HENRY therefore is not bound by any representations made by the Contractor and does not warrant or guarantee the Contractor's workmanship.

HENRY is not responsible or liable for: (a) personal injury or property damage of any kind, even if arising from a breach of this Warranty, (b) damage to the building, or to other components of the building or its contents, including mold, mildew or interruption or complete disruption in the use of the building, (c) expenses associated with installation, removal, excavation, or replacement of other materials, building assemblies, mechanical equipment or scaffolding in connection with accessing, testing, repairing, removal, or replacement of the Product(s), (d) change in color or other aesthetic diminution, and (e) damage to the Product(s) attributable to one or more of the following conditions:

- Acts of God and natural calamities (including, but without limitation, lightning, Beaufort Scale 10 or higher winds, hurricane, tornado, hail, earthquake, flood, or other violent storm or casualty), impact of objects or damage to the Product(s) due to settlement, distortion, failure or cracking of the roof deck, walls or foundation of the building, or for any splitting, cracking, blistering, delamination or separation of the Product(s) due to defect and/or failure of underlying materials not supplied by HENRY.
- Civil insurrection, war, riot, terrorism, intentional destruction or vandalism.
- Exposure to ionized radiation, contamination by radioactivity from any nuclear source, or bird droppings, chemical, or vermin attack on the Product(s).
- Failure to timely report leaks or to repair leaks not covered by this Warranty.
- Leaks caused by water entering from building components adjacent to the Product(s) or moisture migration either through or around other building components such as rooftop equipment, walls, copings, pitch pans and details which do not conform with HENRY details.
- Installations on or through the Product(s) unless done in a manner prescribed and accepted by HENRY.
- Repairs or alterations to the Product(s) that are not authorized first in writing by HENRY.
- 8. Normal wear and tear.
- Any actions or cost resulting from Dundeq smell during application.
- Discoloration, cleanliness, fading or appearance due to substrate surface profile, normal weathering, dirt and atmospheric pollutants.
- 11. Slip resistance reduction or appearance due to fair wear and tear.
- 12. Reflective cracking in the wear coat.
- Leaks due to residual water beneath Dundeq installation, or from another part of the building where Dundeq has not been installed.
- Vapor drive and moisture vapor transmission from the substrate, not made clear to HENRY, in writing, before Dundeq installation.
- Defects in the design, materials, construction or movement of the substrate or structure resulting in substrate bond or cohesive strength failure.
- 16. Any defects, damage, scratches, or failure arising as a result of snow plows, forklifts, work or activity on Dundeq by others, animals, wind launched debris, sharp or abrasive objects, fire or other causes beyond the control of HENRY.
- 17. Any building conditions not meeting ASTM C957 parameters.

Obtaining Warranty Service:

If the Product(s) fails to perform in conformance with the Product(s) label or tech data sheet for its intended application, notify HENRY by email at warranty@henry.com, within 48 hours or within the next business day after discovery of any defect in the Product(s). The OWNER must give written notice to HENRY no later than thirty (30) days after a defect is discovered or should by reasonable diligence have been discovered. Claims under this Warranty will require proof of purchase by the OWNER. HENRY is not responsible for any claims without such proof of purchase. A purchase receipt or other proof of date of original purchase is required before warranty service is provided. Should the alleged failure or the remedy sought by the OWNER lie outside the scope of this Warranty, OWNER agrees to promptly reimburse HENRY for the cost of any investigation requested by OWNER, including remedy costs, plus a HENRY administrative fee of \$250.00.

Time for Remedy:

HENRY shall have forty-five (45) days after receipt of written notification of a Product(s) defect to initiate either of the remedies contained in this Warranty unless prevented by acts of God or events beyond HENRY's reasonable control.

Limitations and Exclusions:

TO THE EXTENT PERMITTED BY APPLICABLE LAW, HENRY DISCLAIMS ANY OTHER WARRANTY EXPRESS OR IMPLIED, THAN THAT PROVIDED FOR HEREIN. THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, GUARANTEES, CONDITIONS AND REPRESENTATIONS, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED CONDITIONS OR WARRANTIES AS TO THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF SOME STATES DO NOT ALLOW THE HENRY PRODUCT(S). LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. HENRY DOES NOT AUTHORIZE ANY PERSON INCLUDING ITS REPRESENTATIVES, TO MAKE ANY REPRESENTATION OR TO OFFER ANY WARRANTY, CONDITION OR GUARANTY IN RESPECT OF THE PRODUCT(S) OTHER THAN THIS WARRANTY. THIS MATERIAL WARRANTY CANNOT BE MODIFIED EXCEPT IN WRITING SIGNED BY HENRY'S WARRANTY MANAGER. THIS LIMITED WARRANTY SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST HENRY AND UNDER NO CIRCUMSTANCES SHALL HENRY BE LIABLE FOR AN AMOUNT GREATER THAN THE ACTUAL PURCHASE PRICE OF THE UNIT OR FOR ANY CONSEQUENTIAL, EXEMPLARY, SPECIAL, INCIDENTAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF USE, OR DAMAGE TO THE BUILDING OR ITS CONTENTS OR THE ROOF DECK. INCIDENTAL, CONSEQUENTIAL AND EXEMPLARY DAMAGES SHALL NOT BE RECOVERABLE EVEN IF THE REMEDIES OR THE ACTIONS PROVIDED FOR IN THIS WARRANTY FAIL OF THEIR ESSENTIAL PURPOSE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. HENRY SHALL NOT BE LIABLE FOR ANY DAMAGES WHICH ARE BASED UPON NEGLIGENCE, GROSS NEGLIGENCE, BREACH OF WARRANTY, BREACH OF CONTRACT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY OF LIABILITY OTHER THAN THE EXCLUSIVE LIABILITY SET FORTH IN THIS WARRANTY.

Conditions of Warranty:

HENRY's continuing liability under this Warranty is conditioned upon the following:

a) The SYSTEM must terminate higher than any possible water level;

- The Product(s) was stored, handled, applied and maintained in accordance with HENRY's instructions, recommendations and specifications in effect at the time of application;
- The Product(s) and all components thereof have been sold by HENRY except where authorized by HENRY;
- d) HENRY and the Contractor have been paid in full for the Product(s);
- The Product(s) has not been altered, modified or repaired without prior written approval of HENRY;
- The OWNER has notified HENRY in writing of any failure of the Product(s) covered by this Warranty within thirty (30) days following such failure;
- g) There has been no misuse, abuse or negligence with respect to the Product(s) on the part of the OWNER, facility or mechanical tradesmen.

Transfer:

This Warranty is assignable conditioned upon prior written approval by HENRY. Such approval is subject to the terms, conditions and fees contained in HENRY's application for transfer of warranty.

Waiver:

HENRY's failure at any time to enforce or rely upon any of the terms or conditions stated herein shall not be construed to be a waiver of its rights hereunder

OWNER's Agreement:

HENRY would not agree to assume the obligations contained in this Warranty in the absence of any of the limitations and exclusions contained herein. Therefore, (1) OWNER's agreement to each and every term of this Warranty is an essential condition precedent to HENRY's obligations hereunder; (2) in the absence of such agreement by the OWNER the Product(s) is sold AS IS AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; (3) failure of any condition precedent herein shall discharge HENRY from all further obligation under this Warranty, and the disclaimer herein of any other warranties, conditions and representations shall survive; and (4) by accepting or asserting any rights hereunder, OWNER irrevocably agrees to indemnify and hold harmless HENRY, its affiliates, successors, assigns, directors, officers, employees and agents (each an "Indemnified Party") from and against all claims, expenses (including attorney's fees and expenses), losses, liabilities and damages in any way related to or arising from matters described in the section of this Warranty entitled "What This Warranty Does Not Cover," and all amounts paid in defense of the foregoing which may be imposed upon, incurred by or asserted against an Indemnified Party by any person, firm or

Except as otherwise expressly provided above, this Warranty shall be governed by and construed in accordance with the laws of the State of Texas without regard to conflict of law rules.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR COUNTRY TO COUNTRY, IF OUTSIDE OF THE UNITED STATES.

By: ______ Date: ______

NOTE: SAMPLE WARRANTIES ARE PROVIDED CONDITIONALLY AND SHOULD NOT BE CONSTRUED OR INTERPRETED AS A REPRESENTATION OR PROMISE THAT HENRY WILL IN FACT PROVIDE SUCH A WARRANTY FOR A SPECIFIC PROJECT. HENRY WARRANTIES ARE NOT VALID OR BINDING UNLESS AND UNTIL ALL OF HENRY'S REQUIREMENTS FOR WARRANTY ISSUANCE ARE MET AND A PROJECT-SPECIFIC WARRANTY IS ISSUED. HENRY RESERVES THE RIGHT TO MODIFY THE TERMS OF ITS SAMPLE WARRANTIES FOR ANY REASON, AT ANYTIME, WITH OR WITHOUT NOTICE. FOR MORE INFORMATION ABOUT HENRY'S REQUIREMENTS, PLEASE CONTACT THE HENRY WARRANTY DEPARTMENT AT WARRANTY@HENRY.COM.

Page 2 – US Extended Material 3/13/2020

Warranty #: SAMPLE Issued: Expiration:

HENRY COMPANY ("HENRY") 5 YEAR EXTENDED MATERIAL WARRANTY DUNDEQ™ VEHICULAR TRAFFIC ("PRODUCT")

Building Name: Building Location:

Building OWNER: ("OWNER")

Date Product(s) Installation Completed:

Contractor: Square Footage:

What This Limited Warranty Covers:

Commencing with the date of completion of installation of the Product(s) and continuing for the duration of this Warranty, if manufacturing defects in the Product(s) cause the Product(s) to not perform in conformance with the Product(s) label or tech data sheet, as published on www.henry.com at time of warranty issuance, or for its intended application, then HENRY at its sole option will, subject to the following section (What This Warranty Does Not Cover), either (1) refund OWNER's original purchase price for the Product(s) prorated by the unused portion of the warranty term; or (2) provide the amount of Product(s) necessary to make repairs. Under option (1), during the first year after installation of the Product(s), HENRY will refund OWNER's purchase price for the Product(s), exclusive of installation cost and minus any proration and costs previously incurred by HENRY for the replacement of Product(s) under this Warranty. After the first year, the purchase price to be refunded will be prorated by the remaining number of years of the Warranty term, minus any cost previously incurred by HENRY for the replacement of Product(s) under this Warranty.

Decisions as to the extent of repair or replacement required will be made solely by HENRY. The opinion of HENRY with respect to this matter shall be final. The remedy under this Warranty is available only for that portion of the Product(s) exhibiting defects at the time of the warranty claim. The replacement Product(s) as well as any remaining original Product(s) will be warranted only for the original warranty period. This limited warranty applies only to Product(s) used for an application specified by HENRY for the Product(s) and applied in strict accordance with HENRY published specifications, as published on www.henry.com in effect at the time of application. IF PRODUCT(S) IS USED FOR OTHER THAN A HENRY SPECIFIED APPLICATION, MISUSED OR ABUSED, IT IS SOLD AS IS AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

What This Warranty Does Not Cover:

This Warranty warrants that the Product(s) will be free from manufacturing defects which affect the ability of the Product(s) to perform in conformance with the Product(s) label or tech data sheet for its intended application during the Warranty Period; it is not a warranty that the Product(s) will never leak or age or to undertake responsibilities, liabilities or obligations other than those specifically identified in the preceding section.

The Contractor who installs the Product(s) is not a representative, agent or employee of HENRY. HENRY therefore is not bound by any representations made by the Contractor and does not warrant or guarantee the Contractor's workmanship.

HENRY is not responsible or liable for: (a) personal injury or property damage of any kind, even if arising from a breach of this Warranty, (b) damage to the building, or to other components of the building or its contents, including mold, mildew or interruption or complete disruption in the use of the building, (c) expenses associated with installation, removal, excavation, or replacement of other materials, building assemblies, mechanical equipment or scaffolding in connection with accessing, testing, repairing, removal, or replacement of the Product(s), (d) change in color or other aesthetic diminution, and (e) damage to the Product(s) attributable to one or more of the following conditions:

- Acts of God and natural calamities (including, but without limitation, lightning, Beaufort Scale 10 or higher winds, hurricane, tornado, hail, earthquake, flood, or other violent storm or casualty), impact of objects or damage to the Product(s) due to settlement, distortion, failure or cracking of the roof deck, walls or foundation of the building, or for any splitting, cracking, blistering, delamination or separation of the Product(s) due to defect and/or failure of underlying materials not supplied by HENRY.
- Civil insurrection, war, riot, terrorism, intentional destruction or vandalism.
- Exposure to ionized radiation, contamination by radioactivity from any nuclear source, or bird droppings, chemical, or vermin attack on the Product(s).
- Failure to timely report leaks or to repair leaks not covered by this Warranty.
- Leaks caused by water entering from building components adjacent to the Product(s) or moisture migration either through or around other building components such as rooftop equipment, walls, copings, pitch pans and details which do not conform with HENRY details.
- Installations on or through the Product(s) unless done in a manner prescribed and accepted by HENRY.
- Repairs or alterations to the Product(s) that are not authorized first in writing by HENRY.
- 8. Normal wear and tear.
- Any actions or cost resulting from Dundeq smell during application.
- Discoloration, cleanliness, fading or appearance due to substrate surface profile, normal weathering, dirt and atmospheric pollutants.
- 11. Skid resistance reduction or appearance due to fair wear and tear.
- 12. Reflective cracking in the wear coat.
- Leaks due to residual water beneath Dundeq installation, or from another part of the building where Dundeq has not been installed.
- Vapor drive and moisture vapor transmission from the substrate, not made clear to HENRY, in writing, before Dundeq installation.
- Defects in the design, materials, construction or movement of the substrate or structure resulting in substrate bond or cohesive strength failure.
- 16. Any defects, damage or failure arising as a result of snow plows, forklifts, work or activity on Dundeq by others, animals, wind launched debris, sharp or abrasive objects, fire or other causes beyond the control of HENRY.
- 17. Any building conditions not meeting ASTM C957 parameters.

Obtaining Warranty Service:

If the Product(s) fails to perform in conformance with the Product(s) label or tech data sheet for its intended application, notify HENRY by email at warranty@henry.com, within 48 hours or within the next business day after discovery of any defect in the Product(s). The OWNER must give written notice to HENRY no later than thirty (30) days after a defect is discovered or should by reasonable diligence have been discovered. Claims under this Warranty will require proof of purchase by the OWNER. HENRY is not responsible for any claims without such proof of purchase. A purchase receipt or other proof of date of original purchase is required before warranty service is provided. Should the alleged failure or the remedy sought by the OWNER lie outside the scope of this Warranty, OWNER agrees to promptly reimburse HENRY for the cost of any investigation requested by OWNER, including remedy costs, plus a HENRY administrative fee of \$250.00.

$oldsymbol{G}$

Time for Remedy:

HENRY shall have forty-five (45) days after receipt of written notification of a Product(s) defect to initiate either of the remedies contained in this Warranty unless prevented by acts of God or events beyond HENRY's reasonable control.

Limitations and Exclusions:

TO THE EXTENT PERMITTED BY APPLICABLE LAW, HENRY DISCLAIMS ANY OTHER WARRANTY EXPRESS OR IMPLIED, THAN THAT PROVIDED FOR HEREIN. THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, GUARANTEES, CONDITIONS AND REPRESENTATIONS, EXPRESS OR IMPLIED, ORAL OR WRITTEN, STATUTORY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED CONDITIONS OR WARRANTIES AS TO THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE HENRY PRODUCT(S). SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. HENRY DOES NOT AUTHORIZE ANY PERSON INCLUDING ITS REPRESENTATIVES, TO MAKE ANY REPRESENTATION OR TO OFFER ANY WARRANTY, CONDITION OR GUARANTY IN RESPECT OF THE PRODUCT(S) OTHER THAN THIS WARRANTY. THIS MATERIAL WARRANTY CANNOT BE MODIFIED EXCEPT IN WRITING SIGNED BY HENRY'S WARRANTY MANAGER. THIS LIMITED WARRANTY SHALL BE THE OWNER'S SOLE AND EXCLUSIVE REMEDY AGAINST HENRY AND UNDER NO CIRCUMSTANCES SHALL HENRY BE LIABLE FOR AN AMOUNT GREATER THAN THE ACTUAL PURCHASE PRICE OF THE UNIT OR FOR ANY CONSEQUENTIAL, EXEMPLARY, SPECIAL, INCIDENTAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, LOSS OF USE, OR DAMAGE TO THE BUILDING OR ITS CONTENTS OR THE ROOF DECK. INCIDENTAL, CONSEQUENTIAL AND EXEMPLARY DAMAGES SHALL NOT BE RECOVERABLE EVEN IF THE REMEDIES OR THE ACTIONS PROVIDED FOR IN THIS WARRANTY FAIL OF THEIR ESSENTIAL PURPOSE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. HENRY SHALL NOT BE LIABLE FOR ANY DAMAGES WHICH ARE BASED UPON NEGLIGENCE, GROSS NEGLIGENCE, BREACH OF WARRANTY, BREACH OF CONTRACT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY OF LIABILITY OTHER THAN THE EXCLUSIVE LIABILITY SET FORTH IN THIS WARRANTY.

Conditions of Warranty:

HENRY's continuing liability under this Warranty is conditioned upon the following:

a) The SYSTEM must terminate higher than any possible water level;

- The Product(s) was stored, handled, applied and maintained in accordance with HENRY's instructions, recommendations and specifications in effect at the time of application;
- The Product(s) and all components thereof have been sold by HENRY except where authorized by HENRY;
- d) HENRY and the Contractor have been paid in full for the Product(s);
- The Product(s) has not been altered, modified or repaired without prior written approval of HENRY;
- The OWNER has notified HENRY in writing of any failure of the Product(s) covered by this Warranty within thirty (30) days following such failure;
- There has been no misuse, abuse or negligence with respect to the Product(s) on the part of the OWNER, facility or mechanical tradesmen.

Transfer:

This Warranty is assignable conditioned upon prior written approval by HENRY. Such approval is subject to the terms, conditions and fees contained in HENRY's application for transfer of warranty.

Waiver:

HENRY's failure at any time to enforce or rely upon any of the terms or conditions stated herein shall not be construed to be a waiver of its rights hereunder.

OWNER's Agreement:

HENRY would not agree to assume the obligations contained in this Warranty in the absence of any of the limitations and exclusions contained herein. Therefore, (1) OWNER's agreement to each and every term of this Warranty is an essential condition precedent to HENRY's obligations hereunder; (2) in the absence of such agreement by the OWNER the Product(s) is sold AS IS AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; (3) failure of any condition precedent herein shall discharge HENRY from all further obligation under this Warranty, and the disclaimer herein of any other warranties, conditions and representations shall survive; and (4) by accepting or asserting any rights hereunder, OWNER irrevocably agrees to indemnify and hold harmless HENRY, its affiliates, successors, assigns, directors, officers, employees and agents (each an "Indemnified Party") from and against all claims, expenses (including attorney's fees and expenses), losses, liabilities and damages in any way related to or arising from matters described in the section of this Warranty entitled "What This Warranty Does Not Cover," and all amounts paid in defense of the foregoing which may be imposed upon, incurred by or asserted against an Indemnified Party by any person, firm or

Except as otherwise expressly provided above, this Warranty shall be governed by and construed in accordance with the laws of the State of Texas without regard to conflict of law rules.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE OR COUNTRY TO COUNTRY, IF OUTSIDE OF THE UNITED STATES.

By: _____ Date: _____

NOTE: SAMPLE WARRANTIES ARE PROVIDED CONDITIONALLY AND SHOULD NOT BE CONSTRUED OR INTERPRETED AS A REPRESENTATION OR PROMISE THAT HENRY WILL IN FACT PROVIDE SUCH A WARRANTY FOR A SPECIFIC PROJECT. HENRY WARRANTIES ARE NOT VALID OR BINDING UNLESS AND UNTIL ALL OF HENRY'S REQUIREMENTS FOR WARRANTY ISSUANCE ARE MET AND A PROJECT-SPECIFIC WARRANTY IS ISSUED. HENRY RESERVES THE RIGHT TO MODIFY THE TERMS OF ITS SAMPLE WARRANTIES FOR ANY REASON, AT ANYTIME, WITH OR WITHOUT NOTICE. FOR MORE INFORMATION ABOUT HENRY'S REQUIREMENTS, PLEASE CONTACT THE HENRY WARRANTY DEPARTMENT AT WARRANTY@HENRY.COM.

Page 2 – US Extended Material 3/13/2020



Product Certification

Henry[®] Dundeq[™] GP Flexcoat

Dundeq GP Flexcoat is 100% solids, 2-part elastomeric polyurethane waterproofing membrane intended for vehicular and pedestrian traffic surfaces.

Dundeq GP Flexcoat meets the following:

- Crack Bridging per ASTM C1305 at 22 mils
- Elongation of 650% per ASTM D412
- Tensile Strength of 1100psi per ASTM D412

Dundeq GP Flexcoat is compatible with the following commonly used Henry products:

- LV Primer
- ST Primer
- STLX Primer
- GC Primer
- GP Wearcoat
- GP Topcoat
- PU Topcoat

Dundeq GP Flexcoat is compatible with cast-in-place and precast normal weight concrete, lightweight structural concrete, CMU, steel, rigid PVC.

Dundeq GP Flexcoat has 0 g/L VOC content

Henry Company production facilities maintain and adhere to a full-time quality control program.

Physical properties and application instructions are available on Henry technical data sheets viewable at www.henry.com. or upon request.



LEED Certification

Henry[®] Dundeq[™] GP Flexcoat Polyurethane Membrane

Henry Dundeq GP Flexcoat is a is a 100% solids, two-component, elastomeric polyurethane membrane used as a waterproofing membrane in the Henry Dundeq System, a seamless, fully-adhered, durable waterproofing system for vehicular and pedestrian traffic surfaces.

Henry Dundeq GP Flexcoat has the following typical physical characteristics:

MR - CREDIT 4.x - RECYCLED CONTENT

RECYCLED CONTENT (POST-CONSUMER): 0% RECYCLED CONTENT (POST-INDUSTRIAL): 0%

MR - CREDIT 5.x- REGIONAL MATERIALS

EXTRACTION SITE:

Raw materials are sourced to Henry from various North American sources and extraction site of raw materials may vary without notice. As a result, the extraction site of materials used to manufacture this product is undetermined.

MANUFACTURING SITE: 23 Commerce Rd, Fairfield, NJ 07004

VOC CONTENT: 0 g/L, max.

Refer to the product specific technical data sheet available at www.henry.com for further information or contact Henry Technical Support at 800-486-1278.