Henry

Cold Fluid-Applied, PMMA, Top Coat

Physical Property	Typical Value	Test Method
Appearance	Gray, White, Clear	-
Application Temperature (Ambient)	20 °F to 90 °F (-6 °C to 32 °C), can be lower	-
Abrasion Resistance	45mg loss	ASTM C501-84 (2009) - C17 wheel, 1000 grams, 1000 cycles
Hardness	55, 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	1146 psi	ASTM D638-08
Elongation	110%	ASTM D638-08
VOC Content (maximum)	0 g/l	ASTM C1250-05
Solar Reflectance	0.688	ASTM E1549
Solar Reflectance Index	84	ASTM E1980
Thermal Emittance	0.91	ASTM C 1371

Description

Henry[®] Deqcoat 50 is a hard, color stable coating based on polyurethane methyl methacrylate (PMMA) technology. Deqcoat 50 is used as a colored topcoat for roof, and traffic systems. Deqcoat 50 can also be used where the Pumadeq system is exposed.

Features

- Cures within 1 hour, including temperatures below 40 °F
- Abrasion and puncture resistant
- UV and Color Stable
- Solvent-free
- No VOC's

Usage

Deqcoat 50 is used as a hard wearing, color and UV stable topcoat 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 above the dew point and rising. Use a surface dew point meter. Air and surface temperatures must be between 20 °F and 90 °F.

For temperatures below 40 °F consult Henry Technical Support: 800-486-1278.

Substrates to be coated must be firm, dry, load bearing, and primed with the appropriate Henry primer. Any previous application of Pumadeq membrane must be free of dust and contaminants that would impair adhesion of **Deqcoat 50**. If the surface is contaminated or overcoat times exceed 48 hours, wipe with Henry[®] **Pumadeq Cleaning Fluid** and clean cloths. After **Pumadeq Cleaning Fluid** evaporates (15 minutes), apply **Deqcoat 50** within 1 hour or re-apply Cleaning Fluid.

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: Prior to using **Deqcoat 50**, it must be thoroughly mixed, using an electric, slow speed (300-400rpm), high torque drill with a CLEAN, spiral, mixing paddle (Jiffy type size according to material amount mixed), to achieve a uniform distribution of the catalyst and paraffin contained in the product. **The mixing paddle and container must only be used for Deqcoat 50, to prevent contamination by other, non-color stable, Pumadeq materials.**

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 any Pumadeq to determine pot life.

- 1) Pre-mix the **Deqcoat 50** for minimum 1 minute
- Then mix Deqcoat 50 together with 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 membrane temperature, ambient temperature and substrate temperatures: At temperatures below 40 °F, consult Henry[®] Product Support: 800-486-1278.
 - 40 °F \rightarrow add 7 volume oz. per gallon
 - 50 °F \rightarrow add 5 volume oz. per gallon
 - $60 \text{ }^\circ\text{F} \rightarrow \text{add } 4 \text{ volume oz. per gallon}$
 - 70 °F \rightarrow add 3 volume oz. per gallon
 - 80 °F \rightarrow add 2.5 volume oz. per gallon
 - 90 °F \rightarrow add 2 volume oz. per gallon

Deqcoat 50 requires less catalyst than other Pumadeq materials. Do not add too much catalyst, this may cause material yellowing. 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 are 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: MUST use clean tools not used with other Pumadeq materials. For best results use small batch sizes (start with 1 gallon). After mixing thoroughly, apply onto surface as soon as possible. **Deqcoat 50** is applied evenly by medium nap (1/2") roller and brush. Apply second coat at right angles to first coat.

Application rate: Deqcoat 50 is applied in two coats:

Install first (1) coat at 80 sq.ft/gal. Apply second (1) coat, at 120 sq.ft/gal. Total two coats = 40 sq.ft/gal. Allow for saturation of rollers and brushes

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

Dry film thickness (DFT) of:

First Coat = 20 mils Second Coat = 12 mils Total two coats about the a minimum of 20

Total two coats should be a minimum of 32 mils.

Rates will change depending on surface profile (>CSP 3-4). **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 **Pumadeq Cleaning Fluid**. Allow **Pumadeq Cleaning Fluid** to evaporate before over coating. **Deqcoat 50** must be applied after 15 minutes minimum, 1 hour maximum of Cleaning Fluid application or it will have to be reapplied. 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**.

Deqcoat 50 requires less catalyst than other materials. Do not over catalyze, this may cause yellowing. Must use clean mixing paddle and tools not used for with other **Pumadeq System** materials.

NOTE: Before using **Deqcoat 50**, 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 **Deqcoat 50** 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. **Deqcoat 50** 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

5 gallons, in metal pails

Colors

White Gray Clear (for use with colored aggregates) Custom colors on demand

Shelf Life/ Storage

Six months in unopened containers stored between 50 °F and 75 °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.

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