Hydroplate 1914

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Amine Epoxy
Geographical Availability	Currently manufactured in Europe only.
Description	Hydroplate 1914 is a solvent free amine cured pure epoxy lining, especially designed for potable water tanks. Suitable for use as a lining in contact with water intended for human consumption.
Features	• Solvent free • ~0% VOC • Fast over-coatable with itself • Cures down to +15°C • Max water service temperature +50 °C • Free of benzyl alcohol and other volatile components • **Certified for BS 6920:2014 - Potable Water** • **WRAS approved for Potable Water <50°C**
Color	White and Grey
Finish	Gloss
Primer	Self-priming
Dry Film Thickness	150 - 500 microns (5.9 - 19.7 mils) per coat 2 x 300 microns DFT recommended for service in Potable Water
Solid(s) Content	By volume: 99 ± 1%
Theoretical Coverage Rates	3.33 m²/l at 300 µm. Allow for loss in mixing and application.
VOC Values	**As Supplied** : 0 g/l
Dry Temp. Resistance	Continuous: 250°C (482°F) Non-Continuous: 300°C (572°F) Discoloration and loss of gloss is observed above 93°C.
Limitations	Epoxies lose gloss, discolour and eventually chalk in sunlight exposure.
Topcoats	Acrylics, Epoxies, Polyurethanes for non-immersion applications.
Wet Temp. Resistance	Immersion temperature resistance depends upon exposure. Consult Carboline Technical Service for specific information. It is recommended that metal tanks operating above 50°C be insulated.

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	Immersion: ISO 8501-1 Sa 2½ Non-Immersion: ISO 8501-1 Sa 2 Surface Profile: 40-85 microns

SUBSTRATES & SURFACE PREPARATION

Concrete or CMU	Concrete must dry at 24°C and 50% relative humidity for at least 28 days. Prepare the surface according to "ASTM D42582 Surface Cleaning of Concrete" and "ASTM D4259 Abrading Concrete". Small irregularities should be corrected.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Do not thin.
Ratio	By volume 2:1 Ratio (A to B)
Pot Life	30 min at 20°C and longer at lower temperatures.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General)	This is a 100% solids coating and may require adjustments in spray techniques. The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.
Airless Spray	Pump ratio: 60:1 minimum Material Hose: 3/8” I.D. minimum Tip Size: .019-.025” Output pressure: 300 bar minimum
Brush & Roller (General)	For small areas and stripe coating only. Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding.
Brush	Use a medium bristle brush.
Roller	Use a medium nap phenolic core roller.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	15°C (59°F)	15°C (59°F)	15°C (59°F)	0%
Maximum	35°C (95°F)	50°C (122°F)	40°C (104°F)	85%

Industry standards are for substrate temperatures to be 3°C above the dew point. Condensation due to substrate temperatures below the dew point can interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle	Dry to Recoat	Maximum Recoat Time	Final Cure Immersion
15°C (59°F)	15 Hours	20 Hours	15 Hours	10 Days	21 Days
23°C (73°F)	10 Hours	15 Hours	10 Hours	4 Days	10 Days
40°C (104°F)	4 Hours	6 Hours	4 Hours	2 Days	4 Days

These times are based on recommended dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before recoating. If the maximum recoat time is exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats. *Note: Final cure temperatures below 15°C are not recommended for tank linings.

CLEANUP & SAFETY

Cleanup	Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.
Ventilation	When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used.
Caution	Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with applicable regulations. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months at 24°C
Shipping Weight (Approximate)	Part A 10 litres (16kg) Part B 5 litres (5kg)
Storage Temperature & Humidity	5°-45°C 0-95% Relative Humidity
Storage	Store indoors.

WARRANTY

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