SIPOXY-SHIELD 274

Multi-Purpose Epoxy Coating

Product No. 6274

Features

- Exceptional Corrosion Protection: Salt and fresh water immersion resistance, corrosive chemical environments.
- Self priming
- Lowers the Cost of Surface Preparation: adhesion to tight rust and damp surfaces.
- Low Temperature Cure: Cures down to -18°C, recoats in 3 hours at 21°C.
- Approvals:
  EPA-Potable Water (Off-White and Buff only), Grain cargo-North England Industrial. Health Services, MIL-P-23236B(SH) Type I and IV Class 2, Canada Health and Welfare-Railcars, dry food, fish holds (Off White and Buff only), USDA approval for incidental food contact (limited colours).

Recommended Use

- Tank Linings and Pipe Coatings: Ballast and potable water tanks, bilge, wet voids and drainage pipes.
- Ships, Offshore and Marine Structures: Above and below water hull areas, decks and superstructures, multi purpose repair coating.
- Structural Steel, Equipment and Masonry Surfaces, Pulp and paper mills, chemical and fertilizer plants, sewage treatment plants, storage tanks and pipes, bridges.
- Fabrication and New Construction: Speeds up production, even at low temperatures, a single multi purpose, surface tolerant coating.

Physical Data

Finish	**:**	Semi-Gloss
Colours	**:**	Various
Volume Solids	**:**	68%

Recommended Film Thickness:
100 - 200 microns dry = 147 - 294 microns wet

Theoretical Coverage:
6.8 m²/ltr. at 100 micron

Density (mixed)	**:**	1.35 kg/ltr.
Drying Times	**:**	
		25°C / 65%RH
Dry to Recoat	:	03 Hours
Hard Dry	:	05 Hours
Heat Resistant	**:**	121°C dry
Flash Point	**:**	38°C

Specification Data

Preparation
Steel
All direct to metal coatings provide the maximum performance over near white blasted surfaces. There are, however, situations and cost limitations, where grit blasting to near white metal is not possible.
SIPOXY-SHIELD Coatings were designed to provide excellent protection over less than ideal surface preparation.
The surface preparation recommended for SIPOXY-SHIELD 274 Coating is to include removal of water, salt, dirt, oil, loose rust and all rust scale. The minimum standard for non immersion service is Steel Structures Painting Council Standard SSPC-SP2 or ISO 8501-1 St2; for immersion service, the minimum standard is SSPC-SP3 or ISO 8501-1 3. Where very rusty surfaces still remain after cleaning for non-immersion service, use SIPSEAL 220 Sealer before application of SIPOXY-SHIELD 274 Coating.

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Application Data

Mixing Ratio by Volume	Base : 4 parts Hardener : 1 part
Mixing Advice	SIPOXY-SHIELD 274 Coating is a two component product supplied in 20 ltr. and 5 ltr. kits which contain the proper ratio of ingredients. The entire contents of each container must be mixed together. Power mix the base portion first to obtain a smooth, homogeneous condition. After mixing the base portion, add the hardener slowly with continued agitation. After the hardener add is complete, continue to mix slowly.
Thinning	Thinner 740 for interior and exterior application. Thinning is not normally required or desired; however, at lower temperatures or in extreme conditions small amounts (20% or less) can be added depending on local VOC and air quality regulations.
Induction Time	SIPOXY-SHIELD 274 Coating requires a 15 minutes induction time.
Pot Life	4 hours at 25°C.
Remarks	Sipoxy Shield 274 hardener is based on a modified amine which becomes darker during storage. This would result in more yellowish shade than Grey RAL 7038 and Off White. This color change would not be detrimental to the performance criteria.
Application Methods	SIPOXY-SHIELD 274 Coating can be applied by both conventional air spray and airless spray equipment. Thinning is required for conventional air spray. SIPOXY-SHIELD 274 Coating may also be applied by brush or roller.
Application Details	For air spray application, a fluid tip of .070" to .086" (DeVilbiss E & D tips) and an air cap with good break-up such as DeVilbiss 704 or 765 will give good results. Where airless equipment is used, a 30 to 1 pump and .019" to .025" tip size will provide a good spray pattern. Tank Coating System - Two coats of SIPOXY-SHIELD 274 Coating at 5 mils to 8 mils (125-200 microns) per coat, plus two stripe coats over sharp edges, cut-outs and welds. Use contrasting colours for each coat and stripe coat. Antifouling paints should be applied over SIPOXY-SHIELD 274 Coating before the SIPOXY-SHIELD 274 Coating has cured hard.
Ventilation	Ventilation should be provided throughout the cure period to insure all the solvents are removed from the coating. For potable water tanks, it is essential that full ventilation be maintained for seven days, with evacuation outlets at the tank bottoms.
Cleaning of Equipment	Use Thinner 740 or 730.

Storage Information

Pack Size	5 and 20 ltr. two component kits.
Storage	Store generally in original sealed container, indoors, at a temperature between 5 and 40°C and relative humidity below 70%.
Shelf Life	1 Year

Safety Information

See the material safety data sheet and product label for complete safety and precaution requirements.

Disclaimer

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