DEVTAR® 5A

Epoxy High Build Coating

Cat. # 221B9988/221C0908

PRODUCT DESCRIPTION

Generic: Hydrocarbon Resin Modified Epoxy Polyamide

General Description: Contains No Coal Tar. A high performance, two-component, chemically-cured high-build epoxy coating for use in areas where coal tar epoxy is normally used. Uniquely formulated to provide corrosion protection for steel and masonry surfaces exposed to water immersion or chemical splash, spillage and fumes. Self-priming on most surfaces. Outperforms Coal Tar Epoxies in all respects, including improved recoatability, toxicity, film embrittlement and application properties.

Typical Uses: Ideal for use on underground steel storage tanks, underground steel piping, in sewage and waste water treatment plants, petroleum refineries, chemical plants, pulp and paper mills, fertilizer plants, hydro and fossil fuel power plants, and underground coal & salt mines. Excellent for fresh and salt water immersion in steel and concrete structures on bridges, pilings, basins, and pits.Can be used on concrete block and poured concrete surfaces in commercial and industrial facilities.

Special Qualifications: Meets or exceeds the performance requirements of Corps of Engineers C-200; Steel Structures Painting Council Paint 16; Federal Specification MIL-P- 23236B, (SH) Type I and IV Class 2.

FEATURES

Advantages:

- Does not contain Coal Tar – no coal tar "burns"
- Ease of application
- Excellent chemical resistance – alkalies, dilute acids, sewage, salt brine, liquid fertilizers, crude oil, etc.
- Excellent water immersion resistance – fresh & salt water
- Abrasion resistant
- Good aged flexibility
- Exceeds performance of Coal Tar Epoxies
- Formulated without lead or mercury containing materials
- May be topcoated with urethane for good appearance

Limitations of Use: Not recommended for prolonged contact with strongly oxidizing chemicals, diluted alkalies, ketones, esters, alcohols or for lining tanks used to store "white" petroleum products. Exterior exposure will cause early loss of sheen and chalking, as is normal for epoxy coatings but this does not affect protective properties.

SPECIFICATION DATA

Color: Black
Finish: Semi-Gloss
Reduction Solvent: T-10 Thinner
Clean-up Solvent: T-10 Thinner
Weight/Gallon: 10.7 lbs./gal.(1.28 kg/L)
VOC (EPA 24): 2.38 lbs./gal.(285 g/L)
Thinned 10% with T-10 thinner 2.78 lbs./gal. (334 g/L)
Solids By Volume (ASTM D 2697-7 days): 69% ±2%
Theoretical Coverage at 1.0 Mil (25 microns) Dry: 1107 sq. ft./gal.(27.2 m^2/L)
Recommended Film Thickness: 6.0-8.0 mils (150-200 microns) dry – 8.7-11.6 mils (218-290 microns) wet.
Systems: Please consult the appropriate system guide, the particular job specification or your ICI Paints Representative for proper systems using this product. Systems must be selected considering the particular environment involved.
Minimum Dry Time (ASTM D 1640): At 8 mils (200 microns) DFT

Substrate Temperature	40°F (4°C)	60°F (16°C)	80°F (27°C)
Minimum Recoat	22 Hours	11 Hours	4 Hours
Dry Hard	48 Hours	18 Hours	8 Hours
Maximum Recoat			
Self	30 Days	30 Days	30 Days

Ventilation, film thickness, humidity, thinning, and other factors can influence the rate of dry.

Warning: The above table provides general guidelines only. Always consult your ICI Paints Representative for appropriate recoat windows since the maximum aged recoat time of this product may be significantly shortened or lengthened by a variety of conditions, including, but not limited to humidity, surface temperature, and the use of additives or thinners. The use of accelerators or force curing may shorten the aged recoat of individual coatings. The above recoat windows may not apply if recoating with a product other than those listed above. If the maximum aged recoat window is exceeded, please consult your ICI Paints Representative for appropriate recommendations to enhance adhesion. Failure to observe these precautions may result in intercoat delamination.
Shelf Life: Over 24 months at 77°F (25°C) – unopened
Mix Ratio By Volume: 1 (base): 1 (converter) – see mixing instructions.
Induction: 15 minutes @ 60-80°F (16-27°C) – see mixing instructions
Pot Life: 5 hours @ 77°F (25°C) & 50% R.H.

PERFORMANCE DATA

Adhesion: (ASTM D 4541) – Excellent
Humidity Resistance: (ASTM D 4585) – Excellent
Abrasion Resistance: (ASTM D 4060) – Very Good
Elongation: (ASTM D 522 Method B) – Very Good
Service Temperature Limits: 250°F (121°C) dry, 120°F (49°C) wet.*
Hardness: (ASTM D 3363), 7 day cure @ 77°F (25°C) – 3H

Chemical Resistance: (ASTM D 1308 – 24 hr. contact) – Excellent. Resists splash and spillage of alkalies, dilute acids, sewage, salt brine, liquid fertilizers, crude oil.

DANGER! FLAMMABLE. HARMFUL OR FATAL IF SWALLOWED. Read label and Material Safety Data Sheet Prior to Use. See other cautions on last page. DSF3-0696

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GENERAL SURFACE PREPARATION

Surfaces must be dry, clean, free of oil, grease, dust, dirt, wax, soaps, powdery residue, form release agents, curing compounds, laitance, other foreign matter and be structurally sound. Remove all loose paint, mortar spatter, mill scale, and rust.

New Surfaces: Steel – Blast to near-white metal surface cleanliness in accordance with SSPC-SP10 or ISO-Sa2 1/2 for immersion service, or commercial blast cleanliness in accordance with SSPC-SP6 or ISO-Sa2 for non-immersion service. Blast profile on steel should be 1.5 - 2.5 mils (38-62 microns) in depth and be of a sharp, jagged, nature as apposed to a "peen" pattern (from shot blasting). Surfaces must be free of grit dust. Prime with this coating. For immersion or under- ground service use two coats of this product at 8 mils (200 microns) dry per coat. For maximum performance, apply over CATHACOAT® 302H primer.

Concrete Block – Remove loose aggregate and repair major voids. Prime with this coating. **Concrete Floors, Poured Concrete** – Cure at least 30 days, abrasive blast or acid etch.

Previously Painted Surfaces: A test patch should be applied to old coatings to check for lifting. If lifting occurs or if old applied coatings are not sound and tightly adherent, they should be removed. Aged epoxy coatings must be cleaned and scuff sanded, or cleaned with DEVPREP® 88 or other suitable cleaner followed by a thorough water rinsing.

DIRECTIONS FOR USE

Tinting: Do not tint

Thinning: Thinning is not normally required or desired. However, at lower temperatures, small amounts (not to exceed 10%) T-10 thinner ONLY can be added subject to local VOC and air quality regulations.

Mixing: DEVTAR® 5A coating is a two component product supplied in 2 gallon and 10 gallon kits which contain the proper ratio of ingredients. The entire contents of each container must be mixed together. Power mix both portions first to obtain a smooth, homogeneous condition. Then add the converter slowly with continued agitation. After the converter add is complete, continue to mix slowly. Allow the mixed material to stand 15 minutes at 60-80°F (16-27°C) before use. Always restir before use. Mixed material is usable for 5 hours; if it thickens, do not add thinner, but discard and mix fresh material. Higher temperatures will reduce working life of the coating; lower temperatures will increase it. Avoid storing or placing containers in direct sunlight. Surfaces coated with this product may become slippery when wet. For additional slip resistance in areas of pedestrian traffic, add one pound per gallon of coarse pumice or other texturing material.

Application: Can be easily applied by airless or conventional (air) spray equipment. An airless spray pump capable of 3,000 psi (207 bars) should be used with a .021" to .031" tip size to provide a good spray pattern. Fluid hoses should not be less than 3/8" ID and not longer than 50 feet (15.2 meters) to obtain optimum results. Longer hose length may require an increase in pump capacity or pressure. For air spray application, use a professional grade gun with a .070" or larger fluid tip, and an air cap that will provide good break-up for heavy materials. The fluid pressure should be kept low (about 15 psi) with just enough air pressure to get good break-up of the coating. Excessive air pressure can cause overspray problems. For touch-up work, DEVTAR 5A coating can be applied by brush or roller. Care should be taken that proper and uniform film thicknesses are obtained. Brushing and rolling may require multiple coats to achieve correct film thickness and/or hiding. Second coat of this material should be applied to first coat within 30 days (@ 80°F (27°C)).

Spreading Rate: Apply at 130-170 sq. ft. per gallon (3.2-4.1 m^2/L) depending on surface texture and porosity. Allow for loss due to over- spray and surface textures or irregularities.

Dry Time (ASTM D 1640)**:** DEVTAR 5A coating dries in 5 hours to recoat and achieves full cure in 7 days at 77°F (25°C) and 50% R.H. High humidity and/or low temperature will retard dry.

Clean-up: Use T-10 thinner.

PRECAUTIONS

DANGER! FLAMMABLE LIQUID AND VAPOR. HARMFUL OR FATAL IF SWALLOWED. ASPIRATION HAZARD-CAN ENTER LUNGS AND CAUSE DAMAGE. HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION. OVEREXPOSURE MAY CAUSE BLOOD, LIVER, KIDNEY DAMAGE. CONTAINS MICA WHICH MAY CAUSE PNEUMOCONIOSIS. USE ONLY WITH ADEQUATE VENTILATION. KEEP OUT OF THE REACH OF CHILDREN. NOTICE: Products in this series contain solvents. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. For emergency information call (800) 545-2643. **Note: These warnings encompass the product series. Prior to use, read and follow product-specific MSDS and label information.** Keep away from heat, sparks and flame. **Do not** smoke. Vapors may ignite. Extinguish all flames, burners, stoves, heaters and pilot lights and disconnect all electrical motors and appliances before use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. If sanding is done, wear a dust mask to avoid breathing of sanding dust. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. Avoid contact with eyes and skin. If you experience eye watering, headaches, or dizziness, leave the area. If properly used, a respirator may offer additional protection. Obtain professional advice before using. Close container after each use. **FIRST AID**: In case of skin contact, wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin, then wash again with soap and water. Repeated applications may be needed. Remove contaminated clothing. For eye contact, flush immediately with large amounts of water, for at least 15 minutes. **Obtain emergency medical treatment**. If swallowed, **obtain medical treatment immediately**. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, get medical help. **KEEP FROM FREEZING.**

DS170-1003

SHIPPING

Flash point: 80°F (27°C)

Packaging: 2 gallon kit (7.57L) — 1.00 gallon base, 1.00 gallon converter; 10 gallon kit (37.85L) — 5.00 gallon base, 5.00 gallon converter

Shipping Weight: 2 gallon kits - 26 lbs. (11.8 kg)
10 gallon kit - 115 lbs. (52.2 kg)

5A (05/07)
Ad Stock #68633D

DEVOE HIGH PERFORMANCE COATINGS
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