DEVCHEM® 256

Chemical Resistant Lining

Cat. # 256KXXXX

(Special Order)

ICI Devoe Coatings is a member of the ICI Paints World Group

PRODUCT DESCRIPTION

Generic: Advanced technology epoxy

General Description: A chemical resistant tank lining and protective coating for highly corrosive environments.

Typical Uses: Use for industrial storage and process chemical tanks and pipelines, high pressure crude oil pipes and separation tanks, and as a protective coating for highly corrosive environments.

FEATURES

Advantages:

- Provides exceptional resistance over a wide range of temperatures and pressures
- Exceptional resistance to a wide range of chemicals and solvents
- Realistic application properties and cure schedules
- Does not require baking to cure
- High volume solids; two coat system

Limitations of Use: See the Devoe Coatings Tank Lining Chemical Resistance Table for specific resistance properties. Exterior exposure will cause color change, early dulling and loss of gloss, but this does not affect the protective properties of the coating. Not recommended for immersion in inorganic acids.

SPECIFICATION DATA

Color: Off-White (256K3750), Tank Gray (256K2750)
Finish: Semi-Gloss
Reduction Solvent: T-10 Thinner
Clean-up Solvent: T-Thinner
Weight/Gallon: 13.56 lbs./gal. (1.63 kg/L)
VOC (EPA 24)**:** 2.66 lbs./gal. (319 g/L)
Solids By Volume: (ASTM D 2697-7 days): 72%
Theoretical Coverage at 1.0 Mil Dry: 1155 sq. ft./gal. (28.3 m^2/L)
Recommended Film Thickness:

Two Coat System
7-8.33 mils (175-208 microns) wet – 5.0-6.0 mils (125-150 microns) dry.

Three Coat System
5.55 mils (139 microns) wet – 4 mils (100 microns) dry.

Total recommended dry film thickness
10-12 mils (250-300 microns) dry. Maximum dry film thickness is 16 mils (400 microns)

Systems: Please consult the appropriate system guide, the particular job specification or your ICI Devoe Coatings' Industrial Coatings Specialist for proper systems using this product. Systems must be selected considering the particular environment involved.
Service Temperature Limits: 300°F (149°C) dry
Minimum Dry Time (ASTM D 1640)**:** At 5 mils (125 microns) DFT

Substrate Temperature	60°F (16°C)	80°F (27°C)
To recoat	16 hours	7 hours
Dry hard	30-36 hours	18-24 hours

If paint and surface temperatures exceed 90°F (37°C), reduce recoat time by half. See Application Guide Supplement.
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 Devoe Coatings Specialist 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 Industrial Coatings Specialist 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
Hardness (ASTM D 3363, 7 day cure @ 77°F (25°C)**:** 6H
Mix Ratio: 4 (base): 1 (converter) – see mixing instructions.
Induction: 15 minutes – see mixing instructions.
Pot Life: 4 hours @ 77°F (25°C) and 50% R.H.

PERFORMANCE DATA

Abrasion Resistance (ASTM D 4060) – Excellent
Adhesion (ASTM D 4541) – Excellent
Humidity Resistance (ASTM D 2247) – Excellent
Impact Resistance (ASTM D 2794) – Good
Moisture Permeability (ASTM E 96) – Excellent
Salt Fog Resistance (ASTM B 117) – Excellent

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9 FINISHES | SPECIAL COATINGS (9800)

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

GENERAL SURFACE PREPARATION

All surfaces must be sound, dry, clean, free of oil, grease, dirt, mildew, form release agents, curing compounds, loose and flaking paint and other foreign substances.

New Surfaces: Steel – Abrasive blast to near-white metal equivalent to SSPC-SP-10 (SSI-Sa2½). The steel profile after blasting should be 1½ to 2½ mils (38 to 63 microns) in depth and be of a jagged nature as opposed to a peen pattern. Surfaces must be free of grit dust. Primer should be applied as soon as possible to prevent rerusting or contamination. Dehumidification equipment should be employed to prevent rerusting. Before applying the first coat, be sure all surfaces are clean and dust free.

Previously Painted Surfaces: Remove old paint to bare metal. Prepare surface and prime as for **New Surfaces**.

DIRECTIONS FOR USE

Tinting: Do not tint.

Thinning: Thinning is not normally required or desired; however, at lower temperatures, small amounts (5% or less) of the solvent on the reverse page can be added depending on local VOC and air quality regulations. Any solvent addition should be made after the two components are thoroughly mixed.

Mixing: DEVCHEM 256 is a two-component product supplied in 5 gallon kits which contain the proper ratio of ingredients. The entire contents of each container must be mixed together. Stir the base portion first to obtain a smooth, homogeneous condition. After mixing the base portion, add the converter slowly while continuing to mix at slow speeds. Be sure all converter is added. After the converter add is complete, continue to mix slowly until the combined components are thoroughly mixed.

Application: Minimum application surface temperature is 50°F (10°C). DEVCHEM 256 should be applied only by air or airless spray. Brushing can be used for touch up or striping. Brushing may require multiple coats to achieve correct film thickness and/or hiding. Do not use rollers. For air spray, use agitated spray pots, 1/2" ID air hoses and 1/2" fluid hose. DeVilbiss MBC-510 gun with an E or D tip and needle and a 704 air cap, or equivalent, equipment is recommended. For airless spray application, use 100 psi air pressure, 3/8" ID fluid hoses not exceeding 100 feet in length, a 30:1 or larger heavy duty Graco pump or equivalent, and .021" to .025" range tip sizes.

Ventilation: It is very important for the safety of the applicator and the proper performance of the DEVCHEM 256 that good ventilation be provided to all portions of the enclosed area. Recommended enclosed area ventilation involves two important phases. Phase one is to pump fresh, dehumidified air into all areas of the enclosed areas, especially "dead air" areas. Phase two is to exhaust, via an explosion proof exhaust fan, the solvent vapors from the lowest portion of the enclosed areas. This practice of pumping fresh air into the enclosed areas and exhausting solvent vapors out of the lowest part of the enclosed area should be provided throughout the application and curing processes. This practice is to insure that all solvents are removed from the coating. Enclosed areas must be cured 7 days a 77° F (25°C) with ventilation before being put into service. At lower temperatures, longer cure times are required.

System: 2 stripe coats on all sharp edges, cutouts and welds.
2 coats of DEVCHEM 256, 5-6 mils (125-150 microns) per coat. Use contrasting colors for each coat and stripe coat.
NOTE: The maximum dry film thickness of the DEVCHEM 256 system is 16 mils (400 microns). Dry film thickness above 16 mils (400 microns) could reduce the service life of the coating.

Spreading Rate: Apply at 193-231sq.ft. per gallon (4.7-5.6 m^2/L) depending on surface texture and porosity. Make allowances for any losses due to overspray or surface irregularities.

Topcoats: To be topcoated with itself.

Dry Time: At 77°F (25°C) & 50% R.H., dries to recoat in 10 hours.

Surface Temperature	Recoat Time	
°Fahrenheit	Minimum	Maximum
50°–59°	24 hours	6 days
60°–69°	16 hours	5 days
70°–79°	10 hours	4 days
80°–89°	7 hours	60 hours
90°–99°	4 hours	24 hours
100°–109°	3 hours	18 hours
110°–120°	3 hours	18 hours

Clean-up: Use T-10 Thinner.

PRECAUTIONS

<insert new warning here>

DS231-0899

SHIPPING

Freight Classification: Paint, Combustible Liquid, UN 1263, PGIII
Flash Point: 100°F (38°C)
Packaging: 5 gallon kit (18.925L)
4.0 gallon base
1.0 gallon converter

Shipping Weight: 5-gallon kit - 74 lbs. (33.5 kg)

256KXXXX (2/00)
Ad Stock #68646D

DEVOE HIGH PERFORMANCE COATINGS
Cleveland,
Ohio, U.S.A.
800-654-2616
www.devoecoatings.com
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