# DEVCHEM® 268

## Abrasion Chemical Resistant Lining

**Cat. # 268KXXXX**

Devoe Coatings is a member of the ICI Paints World Group

## PRODUCT DESCRIPTION

**Generic:** Two-Component Epoxy

**General Description:** A high solids, two coat abrasion chemical resistant lining system with exceptional resistance to a wide range of chemicals and solvents. Provides exceptional resistance over a wide range of temperatures and pressures. Features realistic application and cure schedules, and does not require baking to cure. Does not contain MDA.

**Typical Uses:** Ideal for industrial storage and process chemical tanks and pipelines, high pressure crude oil pipes, spools and separation tanks. Also used as a protective coating for highly corrosive environments. DEVCHEM 268 coating is designed to protect surfaces subject to unusual abrasive and wear conditions common to many heavy-duty industrial service operations.

## FEATURES

**Advantages:**

- Realistic application properties and cure schedules
- Does not require baking to cure
- High volume solids; two coat system
- Does not contain MDA
- Exceptional resistance to various chemicals and solvents
- Tough epoxy binder and special hard reinforcing minerals outwear glass flake polyesters
- Resists heavy direct impacts without delamination or separation
- Suitable for areas subject to mechanical damage
- Use standard airless or air spray equipment to apply
- Can be lance applied to inside of small diameter pipe and spool sections

**Limitations of Use:** Contact your ICI Devoe Coatings Representative 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:** White (268K3530), Pale Blue (268K4132), Spool Green (268KC572), Spool Red (268KC733)

**Finish:** Semi-Gloss

**Reduction Solvent:** T-10 Thinner

**Clean-up Solvent:** T-10 Thinner

**Weight/Gallon:** 11.6 lbs./gal. (1.39 kg/L)

**VOC:** 1.67 lbs./gal. (200 g/L)

**Solids By Volume** (ASTM D 2697-7days): 72%

**Theoretical Coverage at 1.0 Mil** (25 microns) **Dry:** 1155 sq. ft./gal. (24.8 m²/L)

**Recommended Film Thickness: Two Coat System** – 5.0-6.0 mils (125-150 microns) dry – 6.9-8.3 mils (173-208 microns) wet. **Three Coat System** – 4 mils (100 microns) dry – 5.5 mils (140 microns) wet. **Total recommended dry film thickness** – 10-12 mils (250-300 microns) dry. Maximum dry film thickness is 18 mils (450 microns).

**Service Temperature Limits:** 300°F (149°C) dry

**Minimum Dry Time** (ASTM D 1640)**:** At 4 mils (100 microns) DFT

| Self Recoat | 50°F (10°C) | 77°F (25°C) | 90°F (32°C) |
|---|---|---|---|
| Minimum | 24 hours | 10 hours | 4 hours |
| Maximum | 6 days | 4 days | 24 hours |

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

**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 By Volume:** 4 (base): 1 (converter) – see mixing instructions.

**Induction:** 15 minutes at 77°F (25°C) – see mixing instructions.

**Pot Life:** 4 hours @ 77°F (25°C) & 50% R.H.

## PERFORMANCE DATA

**Adhesion:** (ASTM D 4541) – Excellent

**Abrasion Resistance:** (ASTM D 4060) – Excellent

**Humidity Resistance:** (ASTM D 2247) – Excellent

**Impact Resistance:** (ASTM D 2794) – Good

**Salt Spray Resistance:** (ASTM B 117) – Excellent

**Chemical and Solvent Resistance:** (ASTM D 1308) –Excellent





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9 FINISHES SPECIAL COATINGS (9800)

## 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 minimum SSPC-SP10 or SSI-Sa2½ near-white. Blast profile on steel should be 1½ - 2½ mils (38-62 microns) in depth and be of a sharp, jagged, nature as opposed to a "peen" pattern (from shot blasting). Surfaces must be free of grit dust. The first coat of the system should be applied to cleaned surfaces as soon as possible to prevent re-rusting or contamination. **Concrete Floors-Poured Concrete** – Cure at least 30 days, abrasive blast or acid etch. Prime with PRE-PRIME™ 167 or this coating thinned with T-10 Thinner in a 4:1 ratio.

**Previously Painted Surfaces:** Remove old paint, prepare surface and prime as for new steel. Achieve a minimum of SSPC-SP10 or SSI-Sa2½.

## DIRECTIONS FOR USE

**Tinting:** Do not tint.

**Thinning:** Thinning is not normally required or desirable; However, at lower temperatures, small amounts (5% or less) of T-10 Thinner can be added to the mixed components depending on local VOC and air quality regulations. Any solvent addition should be made after the two components are thoroughly mixed. The pot life of the mixed material is 4 hours at 77°F (25°C); 2 hours at 90°F (32°C); and 1 hour at 100°F (38°C). Higher temperatures will reduce working life of the coating; lower temperatures will increase it.

**Mixing:** DEVCHEM 268 Lining is a two-component product supplied in 5 gallon or 1 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 with continued agitation. After the converter add is complete, continue to mix slowly until the system is homogeneous.

**Application:** DEVCHEM 268 Lining should be applied only by air or airless spray. Brushing can be used for touch up or striping. 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 and 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 to 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 268 Coating that good ventilation be provided to all portions of the enclosed area. Recommended tank ventilation involves two important phases. Phase one is to pump fresh, dehumidified air into all areas of the tank, especially "dead air" areas. Phase two is to exhaust, via an explosion proof exhaust fan, the solvent vapors from the lowest portion of the tank. This practice of pumping fresh air into the tank and exhausting solvent vapors out of the lowest part of the tank should be provided throughout the application and curing processes. This practice is to insure that all solvents are removed from the coating. Tanks must be cured 7 days at 77°F (25°C) with ventilation before being put into service. At lower temperatures, longer cure times are required.

**Coating System:** Two stripe coats on all sharp edges, cutouts and welds. Two coats of DEVCHEM 268 Lining at 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 268 system is 18 mils (450 microns). Dry film thickness above 18 mils (450 microns) could reduce the service life of the coating. Cure to put tank into service: 7 days with ventilation at 77°F (25°C) for maximum chemical resistance. If forced heat cure is desired, contact your ICI Devoe Coatings Representative.

**Dry Time:** If paint and surface temperatures exceed 90°F (37°C), reduce recoat time by one half.

| Surface Temperature °Fahrenheit | Recoat Time 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 |
| >120° | Not Allowed | |

**Clean-up:** Use T-10 Thinner.

## PRECAUTIONS

For industrial use only. Keep out of reach of children. Consult Material Safety Data Sheets appropriate for this product for important health and safety information prior to use.

HMIS DATA

| COMPONENT | HEALTH | FLAMMABILITY | REACTIVITY |
|---|---|---|---|
| 268 BASE 268BXXXX | 2* | 2 | 1 |
| 268 CONVERTER 268C0972 | 3* | 2 | 1 |

* Indicates possible chronic health hazard

## SHIPPING

**Freight Classification:** Paint
**Flash Point:** 100°F (38°C)
**Packaging:** 1 gallon kit (3.785L) — 0.80 gallon base, 0.20 gallon converter
5 gallon kit (18.925L) — 4.0 gallon base, 1.0 gallon converter

**Shipping Weight:** 4 - 1 gallon kits - 64 lbs. (29.0 kg)
5 gallon kit - 80 lbs. (36.2 kg)

268KXXXX (7/97)
Ad Stock #68742

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