



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

DEVPLATE™ 495

Vinyl Ester Coating

Cat. # 495SXXXX

PRODUCT DESCRIPTION

Generic: Vinyl Ester Novolac

General Description: A highly chemical resistant protective coating, high build (17-34 mils [425-850 microns]) for maintenance and tank lining service.

Typical Uses: Ideal for use in highly corrosive environments on both ferrous metal and masonry surfaces. Often used in petrochemical plants and industrial waste treatment plants on acid tanks, effluent trenches, chemical fume scrubbers, tank liners (chemical solvents, salts), neutralizing tanks, sludge pits, brine tanks, pickling tanks, clarifiers, dury basins, waste oil tanks, phosphatizers and precipitation chambers.

Also used in the utility industry, especially fossil fuel plants, for plenum chambers, stack liners, duct work, sulfur dioxide scrubber systems, sludge tanks, and neutralizing tanks.

FEATURES

Advantages:

- Excellent mineral acid resistance even at elevated temperatures
- Excellent general chemical and solvent resistance
- Quick recoat time of 5 hours minimum allows same day recoat, with full cure in 48 hours
- DEVPLATE is self-priming. No primer is required or recommended.

Limitations of Use:

Service conditions

Heat: Up to 360°F (182°C) dry heat, with some discoloration (yellowing). Up to 400°F (202°C) dry heat on an intermittent basis also with discoloration. Wet temperature resistance depends upon specific reagent and concentration.

Not recommended for surfaces subjected to abnormal impact and bend.

Do not use for potable water or food contact service.

NOTE: Contact with acids may discolor this coating. The film will remain intact, however, and will continue to provide excellent protection to the substrate.

SPECIFICATION DATA

Color: Beige (495S1865) Gray (495S2766)

Finish: Semi-Gloss

Reduction Solvent: Toluene, no more than 5 ounces per gallon.

Clean-up Solvent: Methyl ethyl ketone or toluene

Weight/Gallon: 10.2 lbs./gal. (1.22 kg/L)

VOC (EPA 24): 0.73 lbs./gal (88 g/L)

Solids By Volume: 90% ± 1%

Theoretical Coverage at 1.0 Mil Dry: 1444 sq. ft./gal. (35.4 m²/L)

Recommended Film Thickness: 17 Mil (425 microns) dry – 22 Mil (550 microns) wet.

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: See limitations of use

Minimum Dry Time (ASTM D 1640): At 17 mils (425 microns) DFT

	75°F (24°C)	77°F (25°C)	90°F (32°C)
Set to Touch	2-5 hours		1-4 hours
Full cure		48 hours	
Recoat–5 hours minimum, 48 hours maximum.			

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: 90 days after shipment to customer. Store only between 50°F (10°C) and 80°F (27°C). Failure to do so will significantly shorten shelf life.

Mix Ratio: Add 2 1/4 liquid ounces (67cc/gal.) of Lupersol DDM-9 MEK Peroxide per gallon (by volume). This is a catalyst concentration by weight of 1.5%.

Induction: None

Pot Life: 2-5 hours @ 78°F (26°C) – 1-3 hours @ 90°F (32°C)

PERFORMANCE DATA

See Product Data Sheet Supplement for chemical resistance data.



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GENERAL SURFACE PREPARATION

All surfaces must be completely dry and cleaned free of dirt, grease, wax, soap or powdery residue, mill scale, rust or other contaminants.

New Surfaces: Ferrous metals – Degrease surface with DEVPREP® 88 prior to abrasive blasting to white metal equivalent to SSPC-SP5 with a jagged blast profile of 3-4 mils (75-100 microns) to ensure adequate adhesion. Surfaces must be

free of grit dust. **Concrete and Masonry** – Level any surface projections and mortar splatter by grinding. Remove weak or powdery surface on concrete by mechanical means such as grinding or brush blasting to remove laitance. Smooth concrete must be dulled by brush blasting.

Previously Painted Surfaces: Treat as listed under **New Surfaces**.

DIRECTIONS FOR USE

Tinting: Do not tint.

Mixing and Thinning: DEVPLATE is a two component product supplied four gallons in a five gallon container to permit easy addition of catalyst and thorough mixing. DEVPLATE must be catalyzed using MEK Peroxide such as Lupersol DDM-9. If being applied by other than two component airless spray (catalyst injection spray) add catalyst as follows: Agitate DEVPLATE with an air driven propeller type mixer for 5 minutes, then add 9 liquid ounces Lupersol DDM-9 catalyst to the four gallon contents of the DEVPLATE container (2 1/4 liquid ounces per gallon) by pouring slowly into the vortex created by agitator blade. Upon completion of catalyst addition, continue agitation for 3-5 minutes to insure uniform dispersion before starting application. Some frothing may occur during mixing. It is harmless and will generally subside within 20 minutes after catalyzation. **NOTE:** If bulk peroxide is not available, use one 80 cc tube of pre-measured MEK peroxide per gallon. Material should be applied full body. However, if reduction or thinning is necessary, up to 5 oz./gallon of toluene may be added after the two components are thoroughly mixed. The pot life of the mixed material is 2-5 hours at 78°F (26°C) and 1-3 hours at 85°-100°F (29°-38°C).

Application: DEVPLATE should be applied by air, airless or plural component spray. Brushing can be used for touch up or striping, do not use rollers. Brushing may require multiple coats to achieve correct film thickness and/or hiding. For two component airless spray (catalyst injection spray) a suggested set up is a Binks Manufacturing Company Model 109-1141 Polyester Gel-Coat Unit with: Resin pump, Ramrod pump catalyzer, R-555 Polycraft Spray Gun, cart mounted, No. 41-2630 Fluid filter screen with Tungsten carbide nozzles. Adjust catalyst and material delivery pumps to provide a catalyst delivery rate of 2 1/4 liquid ounces per gallon of DEVPLATE. For conventional spray and airless spray, careful monitoring during application is essential to prevent clogging of equipment, hoses and guns. Depending upon temperature and the age of the catalyst of DEVPLATE, pot life may be shorter than one hour under certain circumstances. Fluid hoses exposed to direct sunlight may

heat up beyond ambient temperature, particularly if lying on metal surfaces. During application, DEVPLATE temperature should be no higher than 80°F. Hoses should be completely cleaned of catalyzed DEVPLATE if spraying is stopped, except momentarily, for any reason. All equipment, hoses, and guns must be completely cleaned of catalyzed DEVPLATE after application using toluene or methyl ethyl ketone. All equipment, hoses, and guns should be periodically flushed of catalyzed DEVPLATE during application. Pot life specifications must be strictly adhered to. Catalyzed product maintains sprayable viscosity during the specified pot life. However, near the end of the pot life, it rapidly solidifies, and will become impossible to remove from equipment and hoses. For conventional spray, a suggested set up is a Binks Double Regulated Pot with a mastic gun set up. Suggested starting pressures are air pressure at 55 psi and material pressure at 26 psi. DEVPLATE behaves as an active solvent and requires the use of Binks Fluid All Material Hose (or equivalent). A conventional material hose will quickly soften and should not be used. For airless spray, use a 30:1 or larger pump with pressure of 2,000 to 2,500 psi and a tip range of .023"-.031".

Temperature Limits for Application (surface and ambient): 60°-110°F (16°-43°C).

Two coats are required for best performance. The general total film thickness is 34 mils (850 microns) dry applied in two coats of 17 mils (425 microns) dry, 22 mils (550 microns) wet. Normally, the second coat can be applied after a minimum of 5 hours or before a maximum of 48 hours. Specifically, when the film has cured to the point where moderate finger pressure can leave a print but no coating adheres to the fingertip, it is ready to overcoat. Recoating should be done as soon as possible to avoid intercoat contamination. Cure to put tank into service: 7 days with ventilation at 77°F (25°C) for maximum chemical resistance.

Clean-up: Methyl ethyl ketone or toluene.

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
	495SXXX	3*	3	1

* Indicates possible chronic health hazard

SHIPPING

Freight Classification: Paint, 3, PG III, UN1263 (Flammable Liquid)
Flash point: 73°F (23°C)
Packaging: 4 gallons (15.14L)

Shipping Weight: 4 gallon case - 43 lbs. (19.5 kg)

495SXXX (9/00)
 Ad Stock #68660B



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