

SELECTION & SPECIFICATION DATA

Generic Type	Amine-Cured Novolac Epoxy
Description	Glass flake-filled coating with dense cross-linking that exhibits excellent overall chemical resistance to a variety of aggressive chemicals. Glass reinforcement provides added abrasion resistance, permeation resistance and internal reinforcement. 1205 exhibits very good acid resistance. Excellent for use as a lining for tanks or pipes in process facilities where hot water or abrasive conditions exist.
Features	<ul style="list-style-type: none"> • Excellent resistance to acids, caustics, ethanol, gasoline, jet fuels and solvents. • Excellent abrasion resistance. • Excellent thermal shock resistance (0 to 150° C). • Excellent resistance to deionized or demineralized water up to 95°C. • Excellent resistance to crude oil up to 121°C. • Excellent for crude oil storage and transportation up to 121° C • Very serviceable floor coating for chemical process areas, plating shops etc
Colour	Grey
Finish	Satin (25-35)
Primer	Self-priming. May be applied over epoxies and phenolics as recommended.
Dry Film Thickness	381 microns (15 mils) per coat Minimum to be achieved in 1 or 2 coats.
Solids Content	By Volume 70% +/- 2%
Theoretical Coverage Rate	27.6 m ² at 25 microns (1123 ft ² at 1.0 mils) 1.8 m ² at 375 microns (75 ft ² at 15.0 mils) Allow for loss in mixing and application.
VOC Values	As Supplied : 250 g/l These are nominal values.
Dry Temp. Resistance	Continuous: 218°C (425°F) Non-Continuous: 232°C (450°F) Discolouration is observed above 93°C
Limitations	Linings exposed to cargoes warmer than the outside steel temperature are subject to a “cold-wall” effect. The smaller the temperature differential, the less negative influence on performance. Tanks for warm cargoes should always be checked for adequate thermal insulation to minimise the temperature gradient between the cargo and the vessel wall.
Temperature Resistance (Immersion)	Water/Brine: 95°C Crude Oil: 121°C Crude Oil/Water: 121°C Demineralized water: 95°C Ethanol: 54°C
Topcoats	Not Recommended

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PRODUCT DATA SHEET



SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating in accordance with SSPC SP1.
Steel	Immersion: Abrasive blast to SSPC-SP10 (AS 1627.4 Sa 2½) and achieve a uniform jagged blast profile of between 50µm (minimum) and up to 75µm. Non-Immersion: Minimum SSPC SP6 (AS1627.4 Class 2) Surface Profile: 50-75 microns
Concrete or CMU	Concrete must be cured 28 days at 24°C and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258-05 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Voids in concrete may require surfacing; refer to Carboline Technical Service for advice.

PERFORMANCE DATA

Test Method	System	Results
Cyclic Steam-Out Simulation 300°F (150°C)	Blasted Steel 1 ct.	No blistering, cracking or delamination
Temperature Cycling Test Modified Freeze /Thaw test cycling from 0°F-425°F (-17°-218°C) for 11 days	Blasted steel 2 cts	No blistering, cracking, checking, delamination or loss of adhesion.

Test reports and additional data available upon written request.

MIXING & THINNING

Mixing	Power mix separately, then combine and power mix. DO NOT MIX PARTIAL KITS.
Thinning	May be thinned up to 10% with Thinner #2. For application to vertical surfaces it is recommended to keep thinning to an absolute minimum. Use of thinners other than those supplied by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.
Ratio	4:1 Ratio (A to B)
Pot Life	3 Hours at 24°C Pot life ends when coating loses body and begins to sag. Pot life times will be less at higher temperatures.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General)	The following spray equipment has been found suitable and is available from manufacturers.
Conventional Spray	Pressure pot equipped with dual regulators, 13 mm (½") I.D. minimum material hose, 2.8 mm (.110") I.D. fluid tip and appropriate air cap.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Airless Spray	Pump Ratio: 45:1 (min.)* Output: 12 l/minute (min.) Material Hose: 9.5 - 13mm (3/8 - 1/2") I.D. (min.) Tip Size: 0.035-0.041" Output PSI: 2200-2500 *PTFE packings are recommended and available from the pump manufacturer.
Brush	Recommended for touch up and striping of welds only. Use a natural bristle brush with full strokes. Avoid rebrushing.
Roller	Not recommended.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	13°C (55°F)	10°C (50°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	43°C (110°F)	38°C (100°F)	85%

This product simply requires the substrate temperature to be above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required above or below normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Final Cure Immersion	Dry to Recoat or Topcoat
10°C (50°F)	18 Hours	21 Days	48 Hours
16°C (60°F)	12 Hours	14 Days	32 Hours
24°C (75°F)	6 Hours	7 Days	16 Hours
32°C (90°F)	3 Hours	4 Days	8 Hours

These times are based on a 375 micron system dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. Excessive humidity or condensation on the surface during curing can interfere with the cure, can cause discoloration and may result in a surface haze. Any haze or blush must be removed by water washing before re-coating. If the maximum re-coat time is exceeded, the surface must be abraded by sweep blasting prior to the application of additional coats. For force curing, contact Carboline Technical Service for specific requirements.

CLEANUP & SAFETY

Cleanup	Use Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
Safety	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions.
Ventilation	When used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapor concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

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CLEANUP & SAFETY

Caution	This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with the local electrical code. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.
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PACKAGING, HANDLING & STORAGE

Shelf Life	Part A & B: Min. 36 months at 24°C *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	10 Litre Kit - 14 kg)
Storage Temperature & Humidity	4° - 43°C 0-90% Relative Humidity
Flash Point (Setaflash)	Part A: 12°C Part B: 93°C
Storage	Store Indoors.

WARRANTY

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