product data

Phenoline® 1205 ZA

SELECTION DATA

GENERIC TYPE: A glass flake filled epoxy-novolac with amine curative. Components A and B mixed prior to application.

GENERAL PROPERTIES: A dense cross-linked polymer which exhibits outstanding barrier protection against a variety of chemical exposures. Glass flake filled to provide excellent abrasion resistance, permeation resistance, and internal reinforcement.

- Excellent resistance to 232°C dry heat
- Excellent resistance to deionised water up to 93°C
- Excellent resistance to crude oil up to 82°C
- Excellent abrasion resistance
- Excellent overall chemical resistance
- Excellent thermal shock resistance

RECOMMENDED USES: May be used to line tanks or pipes in process facilities, where hot water solutions or abrasive conditions exist. Excellent as secondary containment lining for a variety of chemicals. As a one or two coat external system for pipes and tanks that will be insulated.

NOT RECOMMENDED FOR (immersion in strong acids):

CHEMICAL RESISTANCE GUIDE:

	Immersion	Splash and Spillage
Acids	Very Good	Excellent
Alkalies	Excellent	Excellent
Solvents	Excellent	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent

TEMPERATURE RESISTANCE (non-immersion)*:

Continuous:	218°C
Non-Continuous:	232°C

* Metal tanks should be insulated if temperature exceeds 60°C. Coating discolouration may occur above 93°C.

SUBSTRATES: Apply over properly prepared steel or concrete.

COMPATIBLE COATINGS: Normally applied directly to substrate. Consult StonCor Africa Technical Service Department for specific recommendations.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

	By Volume
Phenoline 1205 ZA	70 ± 2%

VOLATILE ORGANIC CONTENT:

As supplied :	255gm/l
Thinned 10% with Phenoline Thinner	307gm/l

RECOMMENDED DRY FILM THICKNESS PER COAT:
200 Microns

Two coats recommended for 400 microns total DFT.

THEORETICAL COVERAGE: *
3.5 m²/l at 200 microns

* Mixing and application losses will vary and must be taken into consideration when estimating job requirements.

SHELF LIFE: 24 Months minimum when stored at 25°C

COLOUR: White and light grey

GLOSS: Low

ORDERING INFORMATION

Prices may be obtained from your local StonCor Africa Sales Representative or StonCor Africa Customer Service.

APPROXIMATE SHIPPING WEIGHT:

	5L KIT
Phenoline 1205 ZA	7.3 kg
Phenoline Thinner	4.8 kg

FLASH POINT: Seta Flash

Phenoline 1205 ZA Part A	12°C
Phenoline 1205 ZA Part B	>93°C
Phenoline Thinner	25°C

Mar 09 SA replaces Sept 07 SA

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APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

SURFACE PREPARATION: Remove any oil or grease from surface to be coated prior to abrasive blast cleaning.

STEEL: Immersion Service : Abrasive blast to a White Metal Finish in accordance with ISO 8501 Sa3 to obtain a 50-75 micron blast profile. Weld slag must be removed and welds ground to a rounded contour. Striping of properly prepared welds with Phenoline 1205 ZA by brush or spray is recommended prior to full coat application.

NON-IMMERSION SERVICE: Abrasive blast to a near white metal finish in accordance with ISO 8502 Sa2½ to obtain a 50-75 micron blast profile.

CONCRETE: Remove fins and other protrusions by stoning, sanding or grinding. Concrete must be cured at least 28 days at 25°C and 50% R.H., or equivalent time. Remove form oils, incompatible curing agents and hardeners by abrasive blasting.

IMMERSION SERVICE: Abrasive blast to open all surface voids and obtain a surface similar to medium grit sandpaper. Voids in the concrete may require surfacing with appropriate surfacer prior to application of the system.

NON-IMMERSION SERVICE: Horizontal surfaces must be abrasive blasted to remove laitance.

MIXING: Mix separately, then combine in the following proportions. Allow 30 minutes induction time at 25°C.

	5L KIT
Phenoline 1205 ZA Part A	4L
Phenoline 1205 ZA Part B	1L

THINNING: Thin up to 15% with Phenoline Thinner.

Refer to Specification Data for VOC information.

NOTE: Use of thinners other than those supplied or approved by StonCor Africa may adversely affect product performance and void product warranty, whether expressed or implied.

POT LIFE: 3 hours at 25°C and less at higher temperatures. Pot life ends when coating loses body and begins to sag.

APPLICATION CONDITIONS:

	Material	Surfaces	Ambient	Humidity
Normal	18-29°C	18-29°C	18-29°C	30-60%
Minimum	13°C	10°C	10°C	0%
Maximum	32°C	43°C	38°C	85%

Do not apply when the surface temperature is less than 2°C above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

SPRAY: The following spray equipment has been found suitable and is available from manufacturers such as Binks, DeVilbiss and Graco.

CONVENTIONAL: Pressure pot equipped with dual regulators, 12mm minimum I.D. material hose, .110" I.D. fluid tip and appropriate air cap.

AIRLESS:

Pump Ratio:	30 : 1 (min)*
Material Hose:	12 mm min I.D.
Tip Size:	.035" - .041"
Output psi:	2200 - 2500 (152 - 172 Bar)

* Teflon packing are recommended and are available from the pump manufacturer.

BRUSH: For striping of welds, touch-up of small areas only. Use a natural bristle brush, applying full strokes. Avoid rebrushing.

DRYING TIMES: These times are at the recommended dry film thickness (200µ) per coat and 400µ total film thickness. Higher film thicknesses will lengthen cure times.

Temperature	Dry to Handle	Dry to Topcoat	Final Cure
10°C	18 Hours	48 Hours	21 Days
16°C	12 Hours	32 Hours	14 Days
25°C	6 Hours	16 Hours	7 Days
32°C	3 Hours	8 Hours	4 Days

Final cure temperatures below 16°C are not recommended for tank linings. Final cure requirement varies depending on exposure. Force curing is recommended for all tank linings. Consult Carboline Tank Lining Guide or StonCor Africa Technical Service for advice.

Excessive film thickness or poor ventilating conditions require longer drying times and in extreme cases will cause premature failure.

EXCESSIVE HUMIDITY OR CONDENSATION ON THE SURFACE DURING CURING MAY RESULT IN A SURFACE HAZE OR BLUSH; ANY HAZE OR BLUSH MUST BE REMOVED BY WATER WASHING BEFORE RECOATING.

VENTILATION AND SAFETY WARNING: VAPOURS MAY CAUSE EXPLOSION. When used as a tank lining or in enclosed areas, thorough air circulation must be provided during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapour concentration from reaching the lower explosion limit for the solvents used. In addition to proper ventilation, fresh air respirators or fresh air hoods must be used by all application personnel. Where flammable solvents exist, explosion proof lighting equipment must be used. Hypersensitive persons should wear protective clothing, gloves and/or protective cream on face, hands and all exposed areas.

CLEAN UP: Use Carboline Thinner #2.

CAUTION: READ AND FOLLOW ALL CAUTION STATEMENTS ON THIS PRODUCT DATA SHEET AND ON THE MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT.

CAUTION: MAY CONTAIN FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRONIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

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