

ProTXcoat 105

High Temperature Epoxy Repair Fluid

105 is a high performance fluid grade engineering resurfacing compound specifically developed for high temperature immersion conditions and is ideal for tanks, vessels and equipment operating in high temperatures.

105 is based on a complex blend of phenolic epoxy resins and a special polyamino-amide curing system reinforced with abrasion resistant particles to produce a coating with a high level of temperature, abrasion and adhesion properties combined with optimum physical and mechanical strength.

105 has excellent adhesion to most metallic surfaces in one easy application and offers outstanding protection to chutes, hoppers, pipe elbows, valves, pumps and equipment subject to aggressive attack from dry solids and slurries.

Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.

SURFACE PREPARATION

Heavy contamination due to oil or grease must first be removed using MEK (Methyl Ethyl Ketone)

Surfaces should then be abrasive blast cleaned to a minimum Sa2½ - Sa3 BS7079 Part A1 : 1989 or equivalent with a blast profile of 75 – 125 microns corresponding to 'Rough' in BS7079 Part C3/ISO 8503/1. All loose abrasive dust and debris must be blown clear or vacuum cleaned away.

Existing steel surfaces which have corroded in a chemical environment may be contaminated by soluble iron salts within corrosion pits. To prepare these surfaces it is recommended that one of the following treatments be carried out prior to final dry abrasive blasting to the specified standard.

- a) Blasting with a mixture of clean water and abrasive.
- b) Initial dry blast cleaning to remove corrosion and surface coatings followed by high pressure clean water jetting (minimum 1000 psi/66 bar).

MIXING

105 is a two component solvent free product supplied as a Base component and an Activator component which must be mixed together prior to use.

For optimum application properties the materials should be conditioned/ warmed to a minimum temperature of 20°C (68°F) prior to mixing.

Mix the entire contents of the Base and Activator containers.

The mixed material should be used within 25 minutes of mixing at 20°C (68°F). The time will be reduced at higher temperatures and extended at lower temperatures

APPLICATION

For ease of application and optimum performance surfaces should be at a minimum of 20°C prior to **105** being applied.

The mixed material should be applied to the prepared area using a clean brush or squeegee. Application should be carried out as soon as possible after surface preparation is complete, and certainly the same day, otherwise flash blasting will be necessary before application.

In areas where a second layer of **105** is required, this application must be carried out within the initial set time for the first layer, otherwise the surface must be lightly abraded or flash blasted.

VolumeCapacity

425cc per kilo

Coverage Rate

0.9 sqm (1sqft) per kilo

Detailed working recommendations are available from the Technical Centre on request.

PHYSICAL CONSTANTS

Mixing Ratio	Base	Activator
	7	1 Byvolume
	18	1 Byweight

Appearance	Base	Activator
	Dark Grey Paste	Amber fluid

Drying & Cure Times

at 20°C(68°F)	UsableLife	25minutes
	InitialSet	4 hours
	Min Overcoat	4 hours
	Max Overcoat	8 hours

Volume Solids	100%
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V.O.C.	Nil
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Shelf Life Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

Operating Temperature

	Maximum	Continuous
Dry Heat	240°C	170°C
Wet Heat	180°C	130°C (302°F)

PHYSICAL PROPERTIES

CompressiveStrength ASTMD695	1055 kg per cm ² (15000 psi)
Flexural Strength ASTMD790	420 kg per cm ² (6000 psi)
Tensile Shear Adhesion ASTMD4060	140 kg per cm ² (2000 psi) (AbrasiveBlastedMildSteel)
Abrasion Resistance ASTMD4060	20 mg loss per 1000 cycles (1 kg load CS 17 wheel)
Hardness (Rockwell R) ASTM D785	100
Corrosion Resistance ASTMB117	5000 hours

HEALTH AND SAFETY

As long as normal good practice is observed **105** can be safely used.

Protective gloves should be worn during use.

A fully detailed **Safety Data Sheet** is either included with the material or is available on request.

PACKAGING

Supplied in 1kg and 3kg packs

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



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