

Product Information

CHEMGLAZE B 9942 – A/B

Coating for Casting Pits.

FEATURES

- Easy Application
- One Coat System
- Ease of Maintenance

BENEFITS.

- Chemglaze B 9942 – A/B will bond to damp and wet surfaces.
Will build to 500µm in one spray applied coat.
Can be roller or brush applied
- Save up to five days of down time.
Expected service life is a minimum of TWO years.
- Re - coat can be scheduled for normal maintenance periods.
Pits need not be shut down for minor touch-up and repairs.

Chemglaze B 9942 – A/B is a high solids, two component, epoxy coating containing a special inert filler to provide film build and lower the coefficient of thermal expansion. This coating was designed where you require a durable, chemical resistant material is required. Chemglaze B 9942 – A/B can be applied directly to, wet or dry concrete, steel, wood and most other surfaces. The cured film is odourless and non-toxic and may be used in food and potable water service.

Chemglaze B 9942 – A/B has excellent chemical resistance and is not harmed by splash, spillage or fumes of petroleum products, alkalis, acids, salt and fresh water, alcohols and other solvents. In addition, Chemglaze B 9942 – A/B is suitable for short periods of immersion in concentrated acids and alkalis.

Chemglaze B 9942 – A/B will provide excellent protection against the deterioration of D.C. castings pits for aluminium and other structures exposed to marine and industrial environments.

Handling and Safety Precautions.

The precautions outlined in this section are those typically recommended in the painting industry involving solvent based products. They are standard procedures for all knowledgeable painting contractors applying such solvent based coatings. Safety data sheets are available on request from Lord Corporation (Europe) Ltd.,

Chemglaze B 9942 – A/B is an epoxy based coating with methyl ethyl ketone as a solvent. Therefore, like other approved coatings it is highly flammable. The vapour in proper concentration can be toxic and explosive. Chemglaze B 9942 – A/B can cause skin irritation and should not be ingested and eye contact should be avoided.

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Mixing and application areas must be well ventilated to keep concentration of MEK vapours below 0.25% in air. Ventilation must continue after application is complete until vapours are dissipated, for at least a further two hours.

Operators should be equipped with long neoprene gloves and goggles or face shields.

Applicators should have protective clothing, neoprene gloves and forced air hoods or protective hoods or other approved respirators.

Keep materials away from sparks, flames and open lights.

If product gets on skin remove immediately by scrubbing with mild soap and warm water.
If product gets in eyes, flush thoroughly and carefully with clean water and contact a physician immediately.

Chemglaze B 9942 – A/B should be stored in an approved flammable materials storage area and preferable should be kept at 60°F - 95°F.

Mixing and Application Equipment.

Mixing is best accomplished with a ½” electric or pneumatic drill and a 5 gallon “Jiffy” mixer or similar equipment.

Chemglaze B 9942 – A/B is formulated for application by airless spray equipment. These recommendations should be followed carefully.

- a. Use an air compressor capable of supplying 1.25m³ per minutes @ 70kp or larger
- b. Use a 28:1 or higher ratio airless pump, such as a Graco “Bulldog” or similar.
Remove the in-line filter if one is attached on the fluid delivery side of the pump.
Removal of all filters in the system is necessary because the filler in Chemlok will plug them immediately. A stainless steel screen wire may be placed over the pump foot valve or pick up tube and secured with a hose clamp.
- c. Use 30 or 60 m of 10 mm I.D. fluid line, not 3 mm
- d. Use a Graco 4 finger “Golden Gun” or similar spray gun equipped with a “Reverse A-Clean nozzles and a .027”- .045” spray tip.
Remove the filter in the handle of the spray gun.

APPLICATION OF COATING.

I. Cleaning :

Thoroughly clean pit of all debris, oil and grease contamination. Repair all hydraulic leaks, etc, which might result in contamination of the substrate.

II Surface Preparation.

Sandblast or vacublast to a clean firm substrate, All loose or unfirm concrete or old coatings must be removed. Firm tightly adherent old coating need not be completely removed. A blast equivalent to an SSPC-No. 6 commercial blast is the desired results. After blasting

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blow off all dust and residue with high pressure air.

III Application.

Chemglaze B 9942 A/B is a 2 component coating being supplied in a pre- measured oversized 5 Gallon metal mixing and transport container and a 1 gall component B container.

Application can be carried out as soon as the surface preparation is complete.

Mix component A thoroughly with a power agitator for about three minutes.

Add component B in steps of about 1 litre at a time and each time mix thoroughly until all the curing agent has been added.

Mix Ratio is 4 parts component A to 1 part component B.

Mix again with a power agitator for about three minutes. At this point the

Chemglaze B 9942 A/B will appear very thick ; DO NOT THIN. Use an airless spray gun with a 28:1 or higher pressure pump. A reversible, self cleaning head and a large tip ; i.e. .045" are recommended.

Remove all filters from the equipment. Adequate ventilation and an air hood or chemical respirator plus eye protection must be provided for spray operators.

Apply a thin even coat overlapping passes about 50%. Apply a coating thickness of 550µm

wet. This will result in a dry film of about 500µm. The practical (actual) coverage rate at this thickness will be about 1m²/litre

The product may be thinned with up to 2 litres of MEK per 5 gall mixing kit if necessary. This is not recommended but sometimes required if the material is very cold or unusually thick. On rare occasions adding the B component too rapidly will cause the material to curdle. If this occurs, add up to 2 litres of MEK to component A of the remaining kits and stir well before slowly adding the B component.

Clean equipment with epoxy thinner, lacquer thinner, xylene or methyl ethyl ketone.

Application by paint roller is an alternative method. Apply it at supplied solids.

Two coats are necessary to achieve about 500m dry. Re -coat in 6-8 hours.

IV Curing Time.

Allow 16 hours minimum cure time at 15°C or above before placing completed pit in service. Lower temperatures will require longer curing time.

Above 15 °C	16 hrs
13- 15 °C	24 hrs
10-12°C	36 hrs
7-10°C	60 hrs

At temperatures below 7°C the material may not be applied.

Touch up of Small Areas

Degrease area by solvent wipe or detergent and warm water scrub. Sand or wire brush area to completely remove all loose or unfirm material and roughen up surrounding coated surfaces.

Application of the coating

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Mix a small quantity of Chemglaze B 9942 – A/B at a volume ratio of 4:1 of component A to component B. Brush or roller apply to bare area and feather into surrounding prepared coating.

Treat large areas as a complete recoat.

For re – coat or touch up Chemglaze B 9942 – A/B may be applied over itself or coal tar epoxy coatings, provided these procedures are followed.

BACKGROUND AND HISTORY.

For many years conventional coal tar epoxy coatings have been used as interior linings for casting pits in aluminium casting houses. The purpose for these linings is to minimise the chances for a possible explosion which may result from direct contact between molten aluminium and bare concrete or steel should a spill occur. Coal tar epoxy coatings have in the past been the principal coatings used for this purpose.

All castings pits are often below grade and many are below the water table. Combined with constant exposure to cooling water from within, this results in the concrete being saturated with moisture. The result has been many delamination problems with conventional coal tar epoxies. This delamination has caused either an unsafe condition or frequent shut down for repairs.

In addition to the primary problem of delamination, conventional coal tar epoxies have a secondary problem in that the black colour causes low visibility and difficulty of inspection the pits.

LORD CORPORATION in producing Chemglaze B 9942 A/B has addressed these problems and is supplying an easily applied, light coloured coating with excellent adhesion to many substrates.

Chemglaze B 9942 A/B has been specifically formulated to cope with the problems inherent in the use of conventional pit coatings ; i.e. delamination and black colour and has been in use for many years.

TYPICAL PHYSICAL PROPERTIES.

Number of Components	2
Recommended Dry Film thickness	500µm mils for Concrete, 250µm mils for Steel

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Finish and Colour	Flat white
Solids by Volume	90%
Solids by Weight	93%
Density	1.3 (mixed)
Flash Point	48°F, 9°C
Mixing Ration by Volume (A:B)	4 : 1
Theoretical coverage @ 25µm dry	130m ²
Dielectric Strength	non-conductor
Practical Coverage @ 500µm dry	1 litre/m ² (including 20% loss of overspray)
Drying Time (to touch)	6 hours a 25°C
Drying Time (to re - coat-minimum)	8 hours a 25°C
Drying Time (to immersion)	16 hours a 25°C
Minimum Pot Life	4 hour a 25°C
Method of Application	Brush, roller or spray (airless or plural component)
Cleaner *	MEK or Lacquer Thinner.

* Note : Although Chemlok contains less that 10% solvent by volume, MEK fumes can become quite concentrated in a closed area such as a casting pit. Provide adequate ventilation to keep the concentration of solvent below ¼ % volume in air. Provide air hood or chemical respirator and eye protection for spray personnel. Use only spark proof equipment.