



E300 SL DATA SHEET

EPOXY BINDER FOR BROADCAST AND SELF- LEVELING EPOXY FLOORS

DESCRIPTION

HYCHEM E300SL is a 100% solids, solvent free epoxy binder, designed to be mixed with quartz aggregate to produce a chemically resistant epoxy floor topping. The system is applied using a self leveling technique which is then made anti-slip by application of a range of anti-slip aggregates. Anti-slip surface finishes ranging from R9 to R13 can be achieved, dependent on the technique applied.

USE

HYCHEM E300SL is recommended for use as a heavy duty floor topping system for the protection of concrete floor surfaces subject to regular exposure to fats, oils, acids, salts and caustic materials.

TYPICAL APPLICATIONS

- › Abattoirs & meat handling establishments
- › Assembly plants
- › Commercial kitchens and bars
- › Dairy products production
- › General manufacturing floors
- › Public sector assets, schools, gaols and sports complexes
- › Workshop floors
- › Warehouse and distribution centres

FEATURES & BENEFITS

- › High resistance to a wide range of chemicals
- › Versatile – suitable for all general purpose use
- › Abrasion and impact resistant – hard wearing and durable
- › High compressive strength, 60 - 70 MPa
- › Low odour – will not taint food
- › Non-flammable – no fire hazard
- › Available in fast curing version

PHYSICAL PROPERTIES

- › **Mix Ratio - volume:**
2:1 resin to hardener
- › **Specific gravity:**
1.13:1
- › **Pot life:**
30 - 45 mins
- › **Tack free time:**
8 hrs
- › **Application temperature:**
5 to 30°C
- › **Service temperature:**
Up to 80°C
- › **Compressive strength:**
65 MPa (6:1) quartz mortar
- › **Cure Time:**
24 hrs

CHEMICAL RESISTANCE

Chemical	GP	E300	E300 SLF	E300 SL
15% Acetic Acid	60	60	60	60
20% Caustic soda	15	15	15	15
20% Phosphoric acid	40	40	80	40
12% Hypochlorite	10	10	10	10
Solvent blend	300	100	55	100

The chemical resistance of a material can be determined by the weight gain of a sample immersed in the chemical. The greater the weight gain, the poorer the resistance of the material. The table above gives the relative resistance of HYCHEM E300 SL relative to other available epoxy binders.

APPLICATION GUIDELINES

Surface Preparation

Epoxy toppings can exert considerable force on the underlying concrete substrate due to differential thermal movements. It is highly important that the concrete surface is adequately prepared. The cement paste layer and any existing surface coatings need to be removed. This is best carried out using captive shot blasting, grinding or scarifying.

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Mixing

- › In a clean container, mix HYCHEM E300SL liquid components (Resin & Hardener @ 2:1) using a helical mixer at a speed of 500 rpm until the mix becomes homogenous (1 – 2 minutes).
- › Add HYCHEM SL aggregates at a ratio of 1:1 by volume, gradually to the mix whilst still mixing.
- › Move the mixer around from side to side and top to bottom and scrape the sides of the mixing vessel to ensure thorough mixing.

Application Guidelines

E300SL Easy Clean Anti-slip Surface Topping

- › Apply a coat of HYCHEM E300SL to the floor to seal the porous surface. This step is necessary to avoid air bubbles.
- › Apply the resin aggregate mix to the floor using a trowel at a coverage rate of 2 m²/litre and allow to cure.
- › Lightly sand the surface to remove minor irregularities. Apply a coat of HYCHEM SF20FG to provide a washable anti-slip finish.

E 300SL Heavy Duty Anti-slip Surface topping

- › Apply the resin aggregate mix to the floor using a notched trowel at a coverage rate of 2 m²/litre.
- › Into the wet E300SL surface, broadcast anti-slip quartz aggregate generously until a dry beach finish is obtained without surface humps.
- › Once cured, sweep off and vacuum excess loose aggregate.
- › Apply a sealcoat of E300SL in the desired colour at a coverage rate of 2 m²/litre.
- › Lightly broadcast hard wearing aluminium oxide non-slip aggregate into the wet surface.
- › Apply a final top coat of either SF12 or SF20 at a coverage rate of 6-8 m²/litre

Note: The R rating of the surface is dependant on the grade of broadcast aggregate chosen.

Jointing

Joints in the floor need to be reflected in the epoxy topping. When the topping has cured, the surface must be saw-cut and sealed with an epoxy joint sealant such as HYFLEX NS.

Clean Up

Xylene can be used for cleaning tools and equipment before the mixed compound begins to harden.

COVERAGE

The coverage depends on the thickness of the floor, and the volume of aggregate used. As a guideline, 2L of HYCHEM E 300SL resin are required to produce 1m² of topping at a topping depth of 2.5 mm.

PACKAGING

Available in, 12, 30, 60 & 600L kits.

SHELF LIFE

12 months from date of manufacture, stored under shelter at 25°C in original un-opened container.

SAFETY PRECAUTIONS

Epoxy polymer products may cause allergic reactions through skin contact. Goggles and protective gloves and clothing should be worn at all times. Ensure that there is adequate ventilation and air flow and avoid breathing the vapour.

ENVIRONMENTAL CONDITIONS**Warning**

Epoxy products are sensitive to the prevailing temperature and humidity at the time of application.

- › High temperatures will shorten the pot life and application may become difficult due to insufficient time being available to lay the product.
- › Low temperatures and high humidity will result in the epoxy reacting with surface moisture to produce a white powdery finish. To avoid this, epoxy coatings and toppings must not be applied if surface temperatures are below the dew point while the material has not yet cured.
- › The white surface finish is only an aesthetic consideration and does not affect the performance of the material. Chemical spillage of acids and sanitizing agents may coating and result in discolouration.
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