



ULTRA STRONG M

Epoxy Repairing Mortar

Admixtures

Surface Treatments

Protective Coatings

Concrete Repairs

Industrial Flooring

Grouts & Anchors,

Adhesives,

Water Proofing

Sealants

DESCRIPTION

Ultra Strong M is a conventional highly filled epoxy resin quartz aggregate. Strong M mortar is for application to industrial floors which are subject to heavy traffic and light chemical attack.

Ultra Strong M cures rapidly to give a heavy duty floor finish with excellent chemical and abrasion resistance.

Primary Application

Ultra Strong M is used as a floor finish and repair mortar in areas where heavy continual wear is prevalent such as:

- Engineering workshops
- Warehouses
- Trucking lanes

Test houses, etc.

It should not be used where steam cleaning is required or in areas of high chemical spillage. Please refer to data on Ultra Strong M for heavy duty and chemical resistance combined.

Appearance

Ultra Strong M unsealed has a mottled effect with a base background color providing a slightly textured surface. Ultra Strong M sealed has a slightly textured even colored finish.

Durability

Ultra Strong M exhibits the highest order of abrasion resistance.

Thickness

Nominal 4-6mm. Thicknesses greater than 6mm should be

filled with Ultra Strong M and a final 6mm applied to provide a smooth well compacted finish

Substrates

Ultra Strong M adheres well to concrete and grano.

Directions to Use

Surface Preparation

To be assured of maximum adhesion and properties from Ultra resin products, the correct surface preparation is essential. Please refer to technical data sheet "Surface Preparation" reference

Application

Conditions: To achieve the best results please apply while temperature is between 5-40°C. Higher temperature has tendency to reduce the potlife of the product.

Priming Primer

Concrete surface should be primed with ULTRA primer 60.

TECHNICAL DATA

High Strength epoxy repair mortar is three component epoxy resin with a density not greater than 2000 kg/m³ @20°C @30°C

Pot life at 70°F(21°C)	30 mins	15 mins
Tack free time	6-8 hrs	2-4 hrs
Re-coat time		
Suitable for foot traffic	18 hrs	16 hrs
Full cure	7 days	56days
Suitable for wheel traffic	48 hrs	48
Dry to touch at 70°F (21°C)	6 hrs	5 hrs

Primer Info

Pot life at 70°F (21°C)	45 mins	20 mins
Tack free time	3 hrs	1.5 hrs

Compressive Strength 70-80 N/mm²

Tensile Strength 9-10N/mm² when tested at 28 days.

Flexural Strength 25-30N/mm²

Slant Shear Bond Strength 35N/mm²

The Water absorption of the cured mortar shall not exceed 0.02%.

Mixing

Ultra Strong M is a three pack product. Mix the hardener component well into the resin for a period of 1 minute until even colored. Transfer the mixed resin into a rotary drum mixer and add the aggregate slowly until evenly wetted.

Application Technique

Ultra Strong M should be applied directly into uncured wet Ultra Primer. The mortar is spread to an even thickness and the surface closed using a steel float. It can be applied in horizontal locations up to 50 mm thickness or 12 mm in vertical



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Chemical Resistance

Ultra Strong M shows good chemical resistance but should not be used as a chemically resistant heavy duty finish as the Strong M is porous and if the seal coats become damaged chemical attack can occur. For heavy duty chemical resistance please see Ultra Strong M technical data sheet reference.

CHEMICAL RESISTANCE

Acetic Acid, 10%.....	excellent
Acetone	non-resistance
Alkali's	excellent
Ammonia ... 10%.....	excellent
Battery Acid	good
Beer	excellent
Bleach	excellent
Brake Fluid	good
Butanol	good
Citric acid	excellent
Diesel Fuel	excellent
Ethanol	poor
Ethylene Glycol.....	excellent
Gasoline	excellent
Hydraulic Oil.....	excellent
Hydrochloric Acid, 50%	excellent
Industrial Methylated spirits	good
Lactic acid 10%	Excellent
MEK.....	excellent
Methylene Chloride	poor
MIBK	poor
Nitric Acid, 25%	excellent
Oil	excellent
Power Steering Fluid.....	excellent
Phosphoric Acid, 50%.....	Good
Skydrol.....	good
Sugar Solution St.....	excellent
Sodium Hydroxide 50%.....	excellent
Sulphuric acid..... 80%	excellent
Transmission Fluid.....	excellent
Toluene.....	good
Urine.....	excellent
Xylene.....	excellent

Storage:

Avoid to place direct to sun light and always store in shady areas.

ISO Certification:

Our production facility at Pakistan is ISO 9001:2008 ISO 14001:2004 by BUREAU VERITAS and UKAS Management

locations in a single application without using any formwork. Thicker vertical application is possible in layers depends on substrate and exposed steel.

Since Ultra Strong M is extremely durable and resistant to a wide range of acids and industrial chemicals, it will provide excellent protection to repaired area. However, the surrounding parts of the structure may benefit from Ultra Tufcoat 90, a protective coating, to bring them up to the par with repair itself.

Coverage Rates

Ultra Primer 4-6m²/kg Ultra Strong M 1 ft²/kg @5 mm thick

Maintenance Ultra Strong M can be maintained in its original condition providing contamination is not allowed to build up and the floor is regularly scrubbed using proprietary cleaners.

WARRANTY: The Ultra Chemicals LLC. ("Ultra") solely and expressly warrants that its products shall be free from defects in materials and workmanship for 12 months from the date of purchase. Unless authorized in writing by an officer of Ultra, no other representations or statements made by Ultra or its representatives, in writing or orally, shall alter this warranty. ULTRA MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Ultra product fails to conform to this warranty, Ultra will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Ultra does not authorize anyone on its behalf to make any written or oral statements which in any way alter Ultra's installation information or instructions in its product literature or on its packaging labels. Any installation of Ultra products which fails to conform to such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Ultra's products for the Buyer's intended purposes.

Colors Available

All standard Ultra colors White, Gray, Dark Gray, Stone, Green, Sage Green, buff, and Brick red are available.

Storage, Mixing & Application

The storage, mixing and application conditions can affect the quality of the finish produced. Please read technical data sheet.

Technical Advice

For further information on this or any other Ultra product, please contact Ultra Customer Service.

Packaging: Ultra Primer is available in 1 kg, 2.5 kg packs. Ultra Strong M is available in 16 kg packs



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