

**CODE: FU-395**

**PRODUCT NAME:**

***Furan Resin Mortar / Grout***

**DESCRIPTION:**

FU-395 is a two component bonding mortar/grout for chemical resistant masonry units and quarry tiles and bricks. It has excellent resistance to a wide range of acids (including hydrofluoric acid) alkalis and most solvent up to 120 °C.

FU-395 is used with a suitable membrane complete system to protect concrete and steel substrate from attack by corrosive chemicals and physical abuse. It is used in the construction of floors, sumps, trenches, tanks, vessels and bleach towers in chemical processing, food and beverage plants, laboratories textile, steel and pulp and paper mills.

**TECHNICAL DATA:**

Binder	Furan Resin
Pigment	Chemical resistant pigments and Fillers
Finish	Flat
Shade	Light or dark Brown, Black
Specific gravity after mixing	2.1±0.1 Kg/Lit
Volume solid	100 %
Flash point	100 °C
Typical dry film thickness	3mm- 5 cm
Mixing ratio by weight	Base : 100 parts Powder : 400 parts For grout 500 parts for mortar
Substrate	Primed Concrete or steel
Application method	Trowel
Induction Time at <20 °c	Not applicable
Theoretical spreading rate - one coat ( at 5mm)	0.2 M <sup>2</sup> /Lit
Packing	Base : 20 kg Powder : 25 kg
Shelf life	6 Months

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### Drying Time

Temp	Touch dry	Hard dry	Full cure
15°C	6 hours	20 hours	12 days
25°C	4 hours	16 hours	7 days
40°C	1 ½ hours	12 hours	4 days

**Note:** Drying times are dependent on applied film thickness; all data in this catalogue are reported at recommended DFT.

### Pot life

Temp. of paint	15°C	25°C	40°C
Pot life	45 minutes	30 minutes	10 minutes

## SURFACE PREPARATION

All Surfaces to be coated should be clean, dry and free from contamination. Prior to Paint application all surfaces should be assessed and treated in accordance with ISO 8504:1992.

### Primed surfaces

FU-395 can be applied over approved primers. The primer surface should be dry and free from all contamination, and FU-395 must be applied within the overcoating intervals specified.

### Concrete Surfaces

Concrete should be cured for a minimum of 28 days prior to coating. The moisture content of the concrete should be below 6% .All surfaces should be clean and dry

All Cracks in the concrete shall be filled by EP- 320 orVS-380 before applying topcoat.

Surface preparation shall not take place in following conditions:

A-At temperature below 5 °C.

B-When the relative humidity greater than 50-60%.

C-When the metal surface temperature is less than 3 °C above dew the point.

D- Out side day light hours on exterior locations

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## Application Method

FU-395 is supplied as a two-part system comprising of a powder and a resin solution. Mixing ratio is 4 parts by weight Powder to 1 part Solution. The two parts are mixed together immediately prior to use, the liquid is weighed into a clean dry mixing vessel and the filler powder added with constant stirring. A low speed mixing drill with paddle attachment is recommended for mixing or small quantities may be mixed with hand held trowel. Smooth non-flowing cement suitable for bricklaying and tiling should be produced by this mixing action FU-395 set chemically and does not require the addition of any other material.

Setting and hardening depends upon temperature. At temperatures of say 16 - 18°C the mixed mortar stiffens within 30-45 minutes, once this initial reaction has occurred the cement cannot be thinned by the addition of more resin solution. Initial setting takes place in a few hours. Full chemical cure occurs at these temperatures in 48 hours and it is recommended that FU-395 is not put into use before this time period has elapsed.

The cement should not be used at temperatures below 5 C and in warm conditions the powder solution should be stored in cool conditions and mixed in small batches. FU-395 is inclined to cause staining and every care should be taken to restrain its spread away from the joints or masking agents used on the surface of the bricks or tiles.

- In hot climate, material temperature should be 20 to 25 °C prior to mixing; otherwise pot life becomes very short.

**-Do not thin for any reason**

- Paint shall not be applied when wind speed is in excess of 7 m/s

- Do not apply this coating when surface temperature is below 12°C.

### **INSTALLATION:**

#### **Bricklayer Method:**

Trowel on a minimum 0.5 Cm thick bed of FU-395 grout directly on top of the membrane or preceding course of brickwork. Apply the mortar by buttering one side and one end of each brick with a pointing trowel. Set the masonry units in place and position by tapping to form an average 0.3 cm wide vertical joint.

#### **Tile setters Method:**

The masonry units or quarry tile may have waxed faced; however, FU-395 is a water-washable grout. Place a quantity of the grout onto the surface of previously set masonry units or quarry tile. Spread and work grout across surface of the tile at a 45° angle to the joints using a trowel. When filling the joint in this manner, take special care to work the grout to full depth of the joint. After filling the joints, remove the excess mortar from the surface of the masonry units or quarry tile using the trowel as a squeegee. If the masonry units or quarry tile have not been waxed immediately after striking the joints, dampen the face of the tile with water and wipe clean with water soaked burlap.

## **HEALTH AND SAFETY**

This product is Flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

- 1-Circulate adequate fresh air continuously during application and drying.
- 2-Use fresh air masks and explosion proof equipment.
- 3- Prohibit all flames, sparks, welding and smoking.

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