# Repair & Restoration

# **ReArm Epoxy USM**

(Formerly known as MYK REPAIR EPOXY USM)

Universal Screed Modifier for Bedding and Repairing



### TECHNICAL DATA SHEET

# **Product Description**

ReArm Epoxy USM is a two component Epoxy resin universal Screed Modifier. It is a solvent Free, consisting of Specially Modified Resin and Hardener. This Resin and Hardener system along with the graded site filler will produce the mortar. The finished cured mortar is highly impervious and provides high resistance to both chemical and Mechanical loads.

#### Uses

- For repairing of cement -based areas e.g. in production areas, warehouses, ramps
- For producing leveling Screeds and scratch coats for surface preparation and repairs in various industries.
- For Producing site made mortar / epoxy concrete for repairs of hydraulic structures / Dams/ Canals / Bridges/Aquaducts.
- Wall lining in waste water handling structures,
- Lining of sewer lines

# **Features and Benefits**

- Solvent free
- Mixing tools can be cleaned by Water and soap
- Yellowish Translucent
- Consolidating
- Withstands mechanical loading when used as mortar
- Moderate Resistant to dilute alkalis, acids, aqueous salt solutions, lubricants
- High Modulus of elasticity, Ensures effective load transfer at bond interface.

#### **Application Methodology**

#### Step no.1: Surface Preparation

The concrete substrate must be sound and of sufficient compressive strength (minimum 20 N/mm2) with a minimum pull off strength of 1.5 N/mm². The substrate must be level, clean, dry and free of all contaminants such as dirt, oil, grease etc. All previous floor coating if any must be mechanically removed to the maximum extent possible. It is acceptable to re-lay on floor coating that has a firm bond (pull out strength of 1.5 N/mm²).

Concrete substrates must be prepared mechanically depending upon surface condition using abrasive blast cleaning or scarifying or grinding to remove cement laitance and achieve an open textured surface. Weak concrete must be re moved and surface defects such as blowholes and voids must be fully exposed. Repairs (blow holes/voids and surface leveling) to the substrate must be carried out using appropriate repair product. The concrete or screed substrate has to be primed or leveled in order to achieve an even surface. All dust, loose and friable material must be completely removed from surfaces before application of the product, preferably by brush and/or vacuum.

Ensure moisture content of the concrete surface below 4% - no rising moisture according to ASTM D 4263 (Polythene Sheet Method) and above 3°C dew point.

# Step no.2: Method of use

#### **Priming:**

FloArm Primer EP is the Recommended Primer, Mortar or concrete to be apply at wet to wet or tacky condition of the applied primer.

Production of leveling Mortar Concrete/Epoxy Concrete:

#### For Mortar:

1:6 (1 Part ReArm Epoxy USM with 6-part Quartz Sand (-12 + 44) by weight

### For Epoxy Concrete:

1:5:2.5:2.5 (1 Part ReArm Epoxy USM with 5-part Quartz Sand (-12+44)+2.5-part 10mm&20mm 2.5 part by weight)



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#### Step no.3: Product Mixing:

Components A (resin) and B (hardener) are delivered in a predetermined mixing ratio. Tip component B into component A. Ensure that the hardener drains completely from its container.

Mixing of the components is to be carried out with a suitable mixer at approx. 300 rpm (e.g. drill with paddle). It is important to also stir from the sides and the bottom to ensure that the hardener is evenly dispersed. Stir until the mix is homogenous (free from striations); After the Proper mixing of the base and hardener, add the filler (quartzsand) of mixed of concrete aggregate (quartz sand +10mm + 20 mm), With suitable drilling paddles mix the mass for 3 minutes. The minimum temperature during mixing should be +15° C. Do not use mixed material directly from the packaging. Decant the material into a clean container and mix through thoroughly once again

#### **Step no.3: Product Application:**

For repairing: - Apply a primer (FloArm Primer EP) over the cleaned and prepared surfaces, after application of the Primer the mortar or concrete to be poured or apply by hand (Please wear orange Rubber hand gloves for hand application) Compact the material properly so there should be not be loose application. Top surface should be finished with Trowel/putty Patra.

# **Cleaning of Tools:**

Thoroughly clean tools after use with Water immediately, in case of delay of more than 30 minutes of mixing it will require solvent based cleaners (FloArm Tool Clean / FloArm Clean PU).

#### **Precautions:**

Higher temperatures shorten the pot life. Lower temperatures increase the pot life and curing time. Material consumption is also increased at lower temperature once cured ReArm Epoxy USM is harmless. The Hardener (component B) is corrosive. But easily cleaned and washed with water. When using this product the government health and safety protective directive, data sheet M 023, should be observed as well as the advice on the packaging.

# **Technical Data**

Basis	Two component epoxy resin
Colour	Transparent
Mixing ratio:	76:24 parts by weight (B:H)
Density	Approx. 1,08 ± 0,02 g/cm3
Pot life	Approx. 30 minutes at +23 °C
Application temperature	Min. approx. +12 °C max. approx. +30°C
Foot traffic after	Min. approx. 24 hours at +30°C
Fully cured	After approx. 7 days at +30°C
Min. cure temperature	+12° C
Compressive strength	50N/mm², @ 30°C (With using the Quartz sand of -12+44 mesh)
For Proposed Mix as stated in the TDS	

#### Limitation:

Tendency to yellowing on over exposure to direct Sunlight.



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### **Packaging**

300 Kg Pack: 228 Kg Base + 72 Kg Hardener and 15 Kg Pack: 11.4 Kg Base + 3.6 Kg Hardener

Note: - Sand & aggregates do not form part of the pack & can be sourced locally.

#### Storage and Shelf Life

12 months when stored dry and cool above +10° C in the original unopened packaging

#### **Health & Safety**

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## **Product Categories Available**



#### **Legal Note**

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