

FloArm Top EPU 1

(Formerly known as MYK INDUFLOOR EPU-1000)

Solvent free, Epoxy - polyurethane Hybrid
Self – level interior floor topping



TECHNICAL DATA SHEET

Product Description

FloArm Top EPU 1 is a blend of epoxy and polyurethane resin system available in various colours. It is designed for use in a wide range of industrial environments where durable, joint free, low maintenance flooring is required.

FloArm Top EPU 1 is a 100 % solids containing free flowing, four component solvent free system in pre weighed packing for on-site mixing. The finished floor provides a hard wearing, smooth, glossy, joint free, impervious and easy to clean treated surface. Additionally it has mild chemical and alkali resistance.

Uses

- Engineering industries/Auto industries
- Clean rooms / Laboratories /Hospitals
- Electronic Handling / Manufacturing
- Pharmaceutical –Bulk and Formulation.
- Computer assembly units
- IT and other Commercial Buildings

Features and Benefits

- Durable: Provides a hard, impact and abrasion resistant floor topping for interior floors.
- Chemical resistant: good resistant to wide range of chemicals
- Hygienic: Hygienic seamless floor which is easy to clean
- Attractive: available in wide range of colours
- Quick and Easy to apply
- Decreased Friction and static charge formation
- Does not support growth of bacteria and fungus
- Impervious

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 1.5N/mm² for a durable and lasting flooring. 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 using abrasive blast cleaning, scarifying or grinding equipment to remove cement laitance and achieve an open textured surface. Weak concrete must be removed and surfaced effects such as blowholes and voids must be fully exposed. Repairs to the substrate, filling of blowholes/voids and surface leveling must be carried out using appropriate repair product. The concrete or screed substrate has to be prime and leveled in order to achieve an even surface. High spots must be removed by e.g. grinding. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

Ensure moisture content of the concrete surface is below 4 % - no rising moisture according to ASTM D4263 (Polyethylene sheet) and above dew point.

New Concrete

Normal priming is limited to application below 4% surface moisture in concrete. If the moisture content is more, special primers for damp moist floors have to be applied.

MYK Arment special primers FloArm Primer 1250/1280 or moisture barrier such as the Cempo® series of products are recommended. Consult the Technical Services team of MYK Arment for product specification or guidance

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Step no. 2: Product Priming

The concrete surface after proper and thorough surface preparation has to be primed with FloArm Primer 1260 or 1290. The primer is a solvent free resin system. It is designed for better adhesion with the substrate and the flooring system. The primer should be mixed in the given proportions supplied. The entire contents of the hardener should be poured into the base and should be mixed using a low speed drill machine with an attachment for about 3 minutes @ (150-200 RPM) to get a homogeneous mix. Once mixed, the primer should be applied immediately on to the prepared concrete surface. After priming, the surface has to be kept for drying - approximately 8-12 hrs depending on the ambient temperature before proceeding to lay FloArm Top EPU 1.

Step no. 3: Product Mixing

The pre weighed packs of the components - resin, hardener, filler and pigment has to be mixed for 3 to 4 minutes using a low speed electric stirrer (300 -400rpm) with a spiral shaped stirrer. The components should be mixed in a suitably sized mixing vessel. The pigment should be added to the base and should be stirred for 30 seconds till proper dispersion of pigment paste in base. The hardener is then added to the base for about 3 to 4 minutes slowly until an even color, texture is obtained. Add the filler slowly into the mixing container, ensure stirring while pouring. Important: Do not dump the powder component all at once. Mix till the material is completely homogeneous. Mix only that much quantity that could be finished in the stipulated pot life. We are not recommending part mixing, unless under expert supervision.

Step no. 4: Product Application

The material once mixed should be used within its specified pot life; the material is poured on to the primed surface and spread evenly to the required thickness with a 2 mm 'V' notched steel trowel. Care should be taken not to over work the resin. After spreading, the wet resin Film should be firmly rolled with a spiked nylon roller to help release any entrapped air in the material and assist leveling and removing any tool marks. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended.

Technical Data

Pot Life	@ 30°C approx 30 Minutes @ 20°C approx 50 Minutes
Compressive strength (IS 9162)	> 50 N/mm ² @ 30°C after 7 days
Abrasion Resistance	0.35 mm loss as per IS 1237
Flexural Strength (IS 9162)	> 25 N/mm ² @ 30°C after 7 day
Foot Traffic (ASTM C 722)	24 hours @ 30°C , 48 Hours @ 30°C
Vehicular traffic (ASTM C 722)	72 Hrs at 30°C
Chemical Resistance (ASTM C 722)	7 Days @ 30°C
Full Cure (ASTM C 722)	7 days @ 30°C
Mixed Density	Approx. 1.50 Gm/cc
Shore D hardness (ASTM D 2240)	50 -70 @ 7 Days at 30°C
Recommended thickness	1 to 1.5 mm

Following values observed in laboratory cleaned surface condition and Humidity @ 50% , Temp 30

1	Gloss at 60 Deg, 1 Day, as per ASTM D 2457	70
2	SKID Resistance on A Clean dry surface As per ASTM E303	55

Consumption

16 sqm @ 1 mm thickness for a pack of 24 kgs

Note:

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level and wastage etc. It is always recommended to do a field trial prior to large scale application. Ideal application temperature should be between 23°C to 30°C. Other than this temp, please consult MYK Arment.

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Packaging

24 kgs composite packs

Storage and Shelf Life

1 year if stored in cool dry place under shaded area,
away from any extreme temperature or direct sunlight.

Health & Safety

FloArm Top EPU 1 should be applied with gloves and care should be taken to see that it does not fall on skin or eyes. Splashes on to eyes have to be immediately washed with plenty of clean water and medical advice has to be taken.



TECHNICAL DATA SHEET

Product Categories Available



Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.