



AKFIX POLYUREA HM 80

1 – PRODUCT DESCRIPTION

Akfix HM 80 is a hand mixable, self-levelling, 100% solids, flexible, two-component polyurea product with a retarded pot life. It is a high quality joint filler, coating and crack repair material in applications that are time critical. It works well in adverse temperature conditions as the material cures in ambient temperatures from -20 °C to 60°C. Applications can be reopened to foot traffic in 1 hour. The product is ideal for use in cold storage facilities, freezers, and food processing plants where time and temperature are serious concerns.

2 – FEATURES

- 100% solid, VOC free, no solvents,
- Hand mixable and applicable,
- Fast reactivity,
- Return project to service in 60 minutes,
- Non sensitivity to temperature and humidity,
- Remains flexible in cold temperatures,
- Very good tensile and structural strength,
- Resistant to petrochemicals and chemicals.

3 – APPLICATION AREAS

- Small repairs on existing polyurea,
- Concrete crack and repair,
- Concrete joint filler,
- As a floor coating on various places like,
 - Airports,
 - Parking lots and garages,
 - Industrial facilities,
 - Warehouse floors,
 - Manufacturing facilities,
 - Food processing facilities,
 - Cold storage facilities.

4 – SURFACE PREPARATION & APPLICATION

- Remove all dust, debris, oil and any other contamination from the area or joint to be repaired / filled to allow good adhesion of the product. The surface must be completely dry prior to using the material. Dampness and substrates with high moisture will trigger extensive curing of the sealant within a very short period of time. This may cause an excess



of bubbling and foaming problem. If necessary use a suitable primer for surface preparation. New concrete must be cured at least 28 days.

- For bulk mixing, pre-mix amine component thoroughly. Proportion parts at 1:1 ratio by volume of Component "A" and Component "B" by mixing the B side into the A side container until homogenous mix is achieved. Add the 'B' side to the 'A', not 'A' to 'B'. If 'A' is added to the 'B', the material will have thick, putty like consistency. Mix only the quantity that can be used within the pot life of the product.
- Apply material directly to surface to be coated. Do not add solvents or thinners. They will prevent proper cure.
- The product is an aromatic based polyurea. Discoloration from exposure to ultraviolet light may occur, however the physical properties are unaffected.

5- PACKAGING

6 kg kit includes, Iso component: Isocyanate (MDI) Prepolymer (A) and Amine component: Amine Resin (B)

6- SHELF LIFE & STORAGE CONDITIONS

Store the product in a ventilated place away from direct exposure to sunlight. Keep the material between 15 -25 °C for quality reasons. Shelf life of the unopened original packaging is nine months from manufacturing date.

7- SAFETY

Product contains MDI. Avoid breathing vapours. Avoid contact with skin and eyes. Take precautions during application. Wear suitable protective clothing, gloves and eye/ face protection. Adequate ventilation of the working area is recommended. Consult SDS for further information.

9- TECHNICAL FEATURES

Component Properties

	Unit	Method	Isocyanate Prepolymer	Amine Resin
Density (25°C)	gr/cm ³	ASTM D 1217	1,09-1,13	1,00-1,02
Viscosity (25°C)	mPa.s	ASTM D 4878	1000-1100	1100-1200
Shelf life	months	-----	9 months	9 months



Physical Properties

	Method	Data
Chemical structure		Iso component: Isocyanate (MDI) Prepolymer (A) Amine component : Amine Resin (B)
VOC content (%)	ASTM D-1259	0
Solid content (%)	ASTM D-2697	100
Gel time (min)	--	4-5
Tack free time (min)	--	6-7
Density (gr/cm³)	ASTM D-792	0,99-1,03
Tensile strength (MPa)	ASTM D638	≥4
Elongation (%)	ASTM D638	≥250
Hardness (Shore A)	ASTM D2240	70-75
Pull off strength (N/mm²)	ASTM D 4541	concrete: ≥2 steel : ≥5

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