

IPAPOX FM/E

Permanently Elastic Injection Resin and Jointing Compound

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Product Specifications:

IPAPOX FM/E is a solvent-free, modified, 2-component epoxy resin curing into a permanently elastic material.

Areas of Application:

IPAPOX FM/E is used to seal by injection joints and cracks, subject to a high degree of movement, in masonry, natural stone and concrete structures. Moreover, IPAPOX FM/E can be injected into expansion joints inaccessible from above.

Action (Properties):

IPAPOX FM/E, a substance curing into a permanently elastic material, which is unusual for any epoxy-based reaction resin, was reformulated into an even better material.

By lowering its viscosity, its adhesion parameters, already excellent, on dry and moist substrates were further enhanced; moreover, injecting IPAPOX FM/E into more than 2 mm cracks will no longer create any problems. The netting action within this high-grade material was reinforced once more, further improving its tear resistance.

IPAPOX FM/E is resistant against weathering and UV radiation, will remain elastic down to -30°C and is not subject to ageing

Technical Data:

Material:	modified 2-component epoxy resin		
Appearance:	amber-coloured, transparent		
Viscosity:	3000 mPas		
Density:	component I:	1.06 kg/ltr.	
(at 20°C)	component II:	1.00 kg/ltr.	
	mixture:	1.04 kg/ltr.	
Mixing Ratio:	comp. I:	comp. II	
	parts p. weight	2	: 1
	parts p. vol.	1.9	: 1
Pot Life:	approx. 120 minutes at 20°C, assuming 1 kg of resin		
Processing			
Temperature:	not below +10°C		
Curing:			
(at +20°C)	ready to be walked on after 48 hours, will have to be protected against rain for 48 hours, final strength after 7 days		
Shore A:			
Hardness	22 at 20°C	Elongation:	
		at Rupture	500 %
Practical			
Elongation:	25 %		
Storage:	keep dry, protect against direct insolation		
Shelf Life:	1 year within unopened container		
Supplied In:	tinplate containers holding 12 kgs		

Processing Notes:

Use a low rpm stirrer to mix the components thoroughly and homogeneously (for at least 3 minutes)

Injections:

We recommend the following procedure for injecting cracks subject to movements:

- Determine and mark orientation of crack or cracks
- Alternatingly place 13 mm dia. drillholes at either side of crack so as to pierce it as centrally as possible; space drillholes approx. 15-20 cm.
- Using an air gun, blow out the drilling fines.
- Fill cracks more than 2 mm wide using IPATOP SM or IPA cement filler (adding suitably adjusted epoxy filler as required).
- Tension the 13 mm Revolva valves or IPA threaded packers.
- Screw check valve nipple on to the lowest valve and use an IPA high-pressure injection system to inject premixed IPAPOX FM/E until resin appears at the open injection valve above it.
- Screw check nipple on to the next threaded tube and continue injecting.
- Once the top valve has been reached, reinject all valves once more; immediately remove any resin protruding.

Conclude any injection job by taking the check nipples off the Revolva valves, inserting the plastic plugs and, if necessary, neatly filling the drillholes .

Note:

By means of IPA injection systems, numerous construction engineering problems can be solved. However, procedures and materials to be used have to be adapted to any individual case. Call upon our Field Service and our Applications department.

Jointing:

Build in backing (circular cross-section profile) so as to have joint depth correspond to no more than 2/3 of joint width. If any joint is not sufficiently deep to build in a circular-section profile (such as a PE rope), cover the bottom of the joints by means of PE strips in using IPAPOX VA and have it evaporate for approx. 2 hours at 20°C. Inject IPAPOX FM/E using a pouring vessel or a type IPA screw injector.

Please Note:

Until it can be walked on (after approx. 48 hrs.), protect IPAPOX FM/E against rain.

Use IPAPOX cleaning agent or IPAPOX thinners to clean tools and equipment.

Safety Recommendations:

IPAPUR FM/E's component II is corrosive!

Observe all protective measures prescribed by any competent social insurance association against occupational hazards in the chemical industry. Use gloves and protective goggles. Avoid any contact between the product and your skin. For improved protection, apply cream to your hands. Use a good deal of water to wash away any splashes of material reaching your skin or an eye; afterwards, immediately consult a physician.

Any advice we provide in writing or by word of mouth is intended to support your own efforts. It is to be understood as non-binding. Product descriptions imply no representation as to liability for damage, if any. Should there be any question of liability, it will be limited, in respect of any damage, to the value of any goods supplied and used.
