Intectin Plus Injection resin

Product

Product Properties

- *Solvent-free, low viscosity, polyurethane-based elastomeric resin*
- *Long pot life*
- *In contact with water accelerated reaction under limited increase in volume*
- *Elastic and flexible sealing in accordance with ZTV-ING repair standards (DAfStb/German DIN-committee on reinforced concrete structures)*
- *Fulfills UBA – guideline (German Federal Environment Agency) for repair systems in contact with potable water – KTW requirements of test group D2 (small area sealing)*

Areas of Application

- *Permanent watertight elastic and flexible sealing and filling of cracks, joints and voids in building construction, housing and civil engineering, etc. under dry, damp and high hydrostatic pressure conditions*
- *Filling of injection hoses, e.g. Frank Intec Premium Injection Hose system*
- *Sealing of potable water structures*
- *Subsequent sealing as a horizontal barrier and, when necessary, vertical barrier against rising damp in masonry*
- *REACH-assessed exposure scenarios: long term water-contact (crack), periodical inhalation, application*
- *DIN EN 1504-5 classification: U (D1) W (2) (1/2/3/4) (6/35)*

Application

Preparation

Before injection of any cracks, all voids and leaks have to be inspected, and subsequently an injection procedure proposal is to be prepared in accordance with the current technical standards and regulations.

Mixing

Intectin Plus consists of two components, component A (base) and component B (hardener). Both components are mixed in a suitable mixing vessel at the prescribed mixing ratios below. Thoroughly mix components slowly (at max. 250 rpm) for at least two minutes until homogenous.

After mixing the material should be filled into a clean container and briefly mixed again (re-potting). The re-potting is complete when the resin is filled into the storage container of an injection pump, and there shortly remixed.

The actual pot life depends upon the prepared quantity and the ambient temperatures.

Acceleration of reactivity

The reaction time of the resin can be accelerated via Intectin Accelerator (addition of up to 10% relating to the mixture's total weight).

Injection

Intectin Plus can be applied with hand pump Article No. IHPRESS or electrical injection pump.

Under pressurized water flows, a pre- injection using Intectin Blitz resin is recommended in order to prevent the polyurethane resin Intectin Plus from being washed out during hardening. Please refer to the “Intectin Blitz” technical data sheet.

For the injection, the use of injection packers is recommended.

Work must be stopped if substrate and/or ambient temperature drops below +6°C. During the entire curing time a temperature of ≥ +6°C must be observed.

Extensive advice hereto can be obtained from the “Application Information of the General construction supervision Test Certificate for the Intec Premium injection hose system”.

Machine Cleaning

Within the pot life, all equipment must be cleaned with Intectin Special Cleaner. Partially and completely cured material can only removed mechanically.

Technical Data for Intectin Plus

Characteristic	Unit	Value*	Comments
Mxing ratio	p.b.w. p.b.v.	100 : 42 3 : 1	component A : component B component A : component B
Density	kg/dm³	1.05	DIN 53 479
Viscosity	mPa•s	100	DIN EN ISO 3219
Max. expansion	%	100	DIN 53 455
Expansion ratio with water	---	1.3	DIN EN 14406
Shore- A-hardness		50	ISO 868
Application time	minutes	100	DIN EN 1504-5
Application temperature	°C	+ 6 bis + 35 + 6 bis + 30	air and structure temperature material temperature

* All technical values relate to 20°C and 50% relative humidity.

Product Characteristics for Intectin Plus

Colour	light-brown
Cleaning agent	Intectin Special Cleaner Water or water-based cleaning agents must not be used under any circumstances.
Delivery	Box of 6 x 1 litre pack
Storage	Can be stored in original sealed packages by temperature between +5°C and +25°C in dry conditions for at least 1 year. The same requirements are valid for transport.
Diposal	Packs must be emptied completely.

Safety Advice

Please take notice of the safety information and advice given on the packaging labels and safety information sheets. GISCODE: PU40

Chemical Resistance Intectin Plus:

Medium	72 h	4 weeks	Medium	72h	4 weeks
Formic 20%	+	+	Sodium chloride solution 20%	+	+
Ammonia 25%	+	+	Sodium chloride solution saturated	+	+
Calcium chloride solution 20%	+	+	Caustic soda 20%	+	+
Citric acid 5%	+	+	Caustic soda 45%	+	+
Citric acid 50%	+	+	Nonylphenol	-	-
Diesel	+	+	Oxalic Acid 5%	+	+
Jet fuel A1	+	+	Oxalic Acid10%	+	+
Ferrous sulphate 10%	+	+	Phosphoric 50%	+	+
Acetic acid 96%	-	-	Test mixture 4a	-	-
Acetic acid 10%	+	+	Test micture A 20	+	+
Ethyl acetate	-	-	Nitric acid 10%	+	+
Ethylene glycol	+	+	Hydrochloric acid 10%	+	+
FAM-Fuel DIN 51604 A	-	-	Sulfuric acid 20%	+	+
FAM-Fuel DIN 51604 B	-	-	Sulfuric acid 96%	+	-
Hydrofluoric acid 20%	+	o	Styrene	-	-
Formaldehyde 40%	+	+	Tartaric acid 10%	+	+
Potassium hydroxide 44%	+	+	n-Butyl acetate	-	-
Saturated potassium nitrate solution	+	+	Methanol 48%	-	-
Methacrylic acid methyl ester	-	-	Propanol 48%	-	-
Methyl glycol	-	-	H_2O 4%	-	-
Motor oil	+	+	Toluol 60%	-	-
N-Methyl-2-pyrrolidon	-	-	Xylol 30%	-	-
Ammonium sulfate	+	-	Methylnaphthalene 10%	-	-

+ = resistant **O** = partially resistant **-** = not resistant

DISCLAIMER/NOTES

VALUE BASE: All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LEGAL NOTES: Recommendations with regard to product application given in the present technical data sheet for practical assistance of product users are based on our experience and our present scientific and practical body of knowledge. These recommendations, however, are given without engagement and do not establish a contractual relationship or subsidiary duties. These recommendations do not relieve users of their liability and of their own responsibility to test, whether our product is adequate for the intended purpose of application.