BETOLIT EP 0-1 DC IP



Low viscosity epoxy resin for concrete and reinforced concrete injection

1. Product characteristics

BETOLIT EP 0-1 DC IP is a specially formulated low viscous epoxy resin. Meets the requirements of EN 1504-5.

- supplied in specified components ration, no measuring in-situ is needed
- perfect mechanical properties after hardening
- very low viscosity
- after hardening resists to aggressive effects of various acidic and alkali medias, oils, oil products, etc.

2. Use

BETOLIT EP 0-1 DC IP is an epoxy composition based on specially formulated epoxy resin, used mainly for pressure injection of cracks in concrete and reinforced concrete structures.

3. Physical and mechanical parameters

Requirements/results according to EN 1504-5

| Properties | Declared value or class | |
|---|---|--|
| Adhesion by tensile bond (N/mm²) | ≥ 3.0 | |
| Volume changes - non-volatiles (%) | > 95 | |
| Injectability into dry medium | Class 1 | |
| Injectability into non-dry medium | Class 1 | |
| Adhesion by tensile bond strength after thermal and wet-drying cycles (N/mm²) | ≥ 3.0 | |
| Corrosion behavior | does not contribute to corrosion of steel | |
| Dangerous substances | Meets 5.4 | |
| Non-hardened composition | | |
| Color of composition | clear | |
| Density (kg/m³) | 1 130 ± 25 | |
| Workability time | < 15 | |
| Viscosity at 25 °C (mPa.s) | 80 ± 20 | |
| Hardened composition | | |
| Tensile bending strength (MPa) | 42 | |
| Impact strength (kJm ⁻²) | 34 | |

4. Test certificates

Meets the requirements of EN 1504-5.

The product is certified according to Act No. 22/1997 Coll. and Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Continuous independent production quality control is provided by AZL 1687 LABBET®.

Supervision of Quality Management Systems, Environmental Relations and OSH is carried out by Certification Body No. 3029.

5. Instruction for preparation

BETOLIT EP 0-1 DC ÎP low viscosity resin is used mainly as a material for pressure injection of reinforced concrete. Using of epoxy resins in specific cases is described in a technological procedures of BETOSAN s.r.o., see below.

<u>The composition is prepared</u> by proper mixing of components A and B in a specified ratio. The mixing ratio is the following:

| BETOLIT EP 0-1 DC IP | component A (volume parts) | component B (volume parts) |
|----------------------|-----------------------------------|-----------------------------------|
| | 2 | 1 |

Components A and B shall be perfectly mixed by a slow speed propeller mixer in a vessel of sufficient volume.



6. Application

Application procedure is in detail specified in the internal technological procedure of BETOSAN company. Specifically the technological procedure for reinforced concrete injection "Technological procedure for cracks injection using **BETOLIT EP 0-1 DC IP** epoxy resin."

7. Packing and storage

BETOLIT EP 0-1 DC IP component A is supplied in metal canisters of 6 kg, component B is supplied in metal canisters of 3 kg.

Shelf life of the product in original undamaged packing is 24 months. During manipulation and storage keep in mind that it is a flammable material of Class IV.

8. Health protection at work

Work with a two-component system **BETOLIT EP 0-1 DC IP** requires adequate sanitary measures usual for work with materials on the epoxy basis. First of all it is necessary to follow relevant provisions of Czech Standards ČSN 64 1301 and ČSN 65 0201. The workplace shall be properly ventilated, workers shall have adequate personal protective equipment, and no eating, drinking or smoking is allowed while working.

In case of eye contamination it is necessary to rinse out eyes with clean water and immediately seek out medical aid. In case of accidental swallowing it is necessary to immediately cause vomiting and immediately seek out medical aid. In case of afflicted skin it is necessary to wash thoroughly the irritated skin with warm water and soap and treat it by a suitable reparative cream.

BETOLIT EP 0-1 DC IP is a flammable material of Class IV.

Issued MSDS meets the requirements of EC-Regulation 1907/2006, Article 31.

Because the product meets the criteria for classification as hazardous, it is necessary to provide the recipient or carriers with MSDS.

In countries where regulation REACH (par. 33.1): EU regulation on chemicals and their safe use (REACH: EC 1907/2006) is valid, professional users and distributors must be provided with following information automatically and without request:

This product is subject to Regulation (EC) No. 1907/2006 (REACH). It does not contain any substances that could be released from product under normal or reasonably foreseeable conditions of use. Therefore, there are no registration requirements for substances in articles within the meaning of. Article 7.1 of the Regulation.

Based on our current knowledge, this product does not contain SVHC (substances of very high concern) from candidate list published by the European Chemicals Agency in concentrations above 0.1% (w / w).

9. Waste disposal

During disposal of contaminated packages or clearing debris from product, it is necessary to follow the Act No. 185/2001 Coll. on waste, as amended.

10. Important notice

All information mentioned above, especially advice for processing and application of our products, is based on our knowledge from the development of chemical products and on years of experience with applications in practice at standard conditions, and proper storage and use. Due to the differing conditions during processing, high count of products, varying nature and modifications of base and other external influences, the procedure based on the information provided or on other written or oral recommendations, may not always ensure satisfactory working results. BETOSAN s.r.o. assumes no liability for provided advice or recommendation. The applicator must prove that he submitted complete information on time and in writing which is necessary for a proper detailed assessment by BETOSAN s.r.o. The applicator must test the suitability of the products for the intended application. Proprietary rights of third parties, above all, must be taken into account. All received orders are subject to our current "General sales and delivery conditions". Please always make sure that you follow the most recent issue of the Technical Data Sheet. It is available, along with other information, at our Technical Department or at www.betosan.cz.











| C E 1301 | | |
|---|---|--|
| BETOSAN s.r.o. Na Dolinách 28, 147 00 Prague 4 | | |
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| 9-9/072013 | | |
| EN 1504-5:2013 U(F1)W(1)(1)(10/30)(0) | | |
| BETOLIT EP 0-1 DC IP Low viscosity epoxy resin for stress-bearing filler | | |
| Adhesion by tensile bond (N/mm²) | ≥ 3.0 | |
| Coherence as oblique shear strength | NPD | |
| Volume changes - non-volatiles (%) | > 95 | |
| Glass transition temperature | NPD | |
| Injectability into dry medium | Class 1 | |
| Injectability into non-dry medium | Class 1 | |
| Adhesion by tensile bond strength after thermal and wet-drying cycles (N/mm²) | ≥ 3.0 | |
| Corrosion behavior | does not contribute to corrosion of steel | |
| Dangerous substances | Meets 5.4 | |

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