

BETOLIT EP 0-1 DC TH



Epoxy based industrial adhesive

1. Product characteristics

BETOLIT EP 0-1 DC TH is a specially formulated two-component thixotropic adhesive epoxy composition.

- supplied in specified ratio of each component; no weighting in-situ is needed
- components have different colors for perfect visual control over the homogenization
- hardens even under higher relative humidity
- doesn't shrink after hardening, perfect mechanical properties
- thixotropic (doesn't flow down), can be used on vertical surfaces and suspended ceilings
- after hardening is permanently resistant to effects of aggressive both acidic and alkaline media, oils, oil products, etc.

2. Use

BETOLIT EP 0-1DC TH is a specially formulated two-component epoxy composition, used primarily as industrial adhesive, fine adhesive screed or troweling composition for concrete, stone, ceramics, stoneware, fused basalt, glass, polyester or epoxy members, wood or plywood, steel, aluminum, cast iron and number of other silicate and non-silicate materials. Besides it can be used as adhesion bridge for anchoring of steel members, structural connection in narrow joints, adhesion and structural connection of concrete members, cantilevers, curbs, columns, connectors, holders etc.

3. Physical and mechanical parameters

Requirements / results according to EN 13813

Properties	Declared value or class
Reaction to fire (NO)	F
Abrasion resistance according to BCA (mm)	AR 0.5
Adhesion (MPa)	B2.0
Impact resistance (Nm)	IR min. 10 Nm
Compressive strength (MPa)	C80
Tensile bending strength (MPa)	F50

Physical and mechanical parameters

non-hardened composition	
Color of composition	A black /B white
Density (kg/m ³)	1750±25
hardened composition *)	
Tensile bending strength (MPa)	> 70
Compressive strength (MPa)	> 140
Adhesion to concrete (MPa)	> 3 resp. break in concrete
Adhesion to steel (MPa)	> 14

*) Test carried out after 10 days of hardening under 20 °C ± 5 °C

4. Test certificates

Meets the requirements of EN 13813.

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, environmental and OSH systems is performed by Certification Body No. 3029.

5. Instruction for preparation and application

Base. Any incoherent, loose or weatherworn particles shall be removed from the base. The surface cannot be contaminated by substances negatively effecting adhesion of the epoxy composition to the base (fats, greases, oils, etc.). Tensile strength of surface layers of the base shall be at least 1.5MPa. When the composition is applied, the new concrete shall be 3-6 weeks old depending on climatic conditions.

It is recommended to roughen concrete substrate by sand blasting, mechanical abrasion or water jet blasting etc.



When applying on cast iron or steel it is necessary to totally remove corrosion products (degree SA 2½). Surface must be clean of all greases, fats, oils or in some cases flakes.

When applying on ceramics, stone, glass, epoxy or polyester it is necessary to clean the surface of all greases, fats, oils and it is recommended to also roughen the surface.

This composition is prepared by proper mixing of components A and B in specified rate. The mixing rate is the following:

BETOLIT EP 0-1 DC TH	component A (weight parts)	component B (weight parts)
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Components A and B are mixed in a sufficiently voluminous vessel by an electrically driven low-speed propeller agitator until the color of the composition is absolutely homogeneous (no streaks apparent in the composition). Mixing time approx. 3-4 minutes

Workability. Workability of the prepared composition is at least 70 minutes under 20°C. If larger quantity is mixed at single moment the self-heating of the reacting composition shortens the workability time.

Neither temperature of the base nor temperature of ambient air shall be below + 5°C and above + 30°C. It is necessary to make sure that the temperature is above dew point especially when bonding metal materials.

Application of adhesive composition. Composition is usually applied by spatula, float, trowel etc. It is necessary to make sure that the adhesive is properly worked into the pores of the bonded surfaces, the pores should be filled with the adhesive. The bonded surfaces should be forced together in such a way that the adhesive is pushed out of the joint. In some cases it is necessary to fix bonded materials together mechanically during curing of the adhesive (24 hours at 20°C). Maximum thickness of the material should not exceed 30 mm. It is necessary to state that in general the thinner the layer of the adhesive the better the quality of bonded joint.

6. Specific consumption

Spreading capacity (specific consumption) of the **BETOLIT EP 0-1 DC TH** amounts to ca 1700 g/m²/mm thickness of the glued joint.

7. Packing and storage

BETOLIT EP 0-1 DC TH component **A** is supplied in cans of 2 kg , component **B** is supplied in cans of 1 kg.

The shelf life of the product in original undamaged packing is 24 months.

Store in a dry place at +5 ÷ +30°C. During storing and transportation take into account that it's a flammable material of a IV. Class.

8. Health protection at work

Work with a two-component system **BETOLIT EP 0-1 DC TH** 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.

Non-hardened **BETOLIT EP 0-1 DC TH** is a flammable material of the IV. Class.

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.

11. CE marking

 1301	
BETOSAN s.r.o. Na Dolinách 28, 147 00 Prague 4	
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7-17/072013	
EN 13813:2002 SR-C80-F50-B2-AR0,5-IR10	
BETOLIT EP 0-1 DC TH Epoxy based industrial adhesive	
Reaction to fire	F
Abrasion resistance according to BCA	AR 0.5
Adhesion	B2.0
Impact resistance	IR min. 10 Nm
Compressive strength	C80
Tensile bending strength	F50

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SYNTHETIC RESIN BASED MATERIALS

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