# **BETOLIT ED**



# Two-component epoxy-based protective coating with modifying bituminous component

# 1. Product characteristics

**BETOLIT ED** is a specially formulated epoxy composition.

- supplied in the stated ratio of each component, no measuring in-situ (at the site) needed
- Ardened coat is flexible, abrasion resistant, impact resistant and resistant to various chemicals
- suitable for both interior and exterior
- keeps its properties under wide range of both positive and negative temperatures

### 2. Use

**BETOLIT ED** is specially formulated epoxy composition that is suitable for waterproofing of basements, substructure, overflow catchments and safety reservoirs, protection of sewers etc. Material can be applied on concrete or steel even in structures that will be permanently in water or under-ground.

Hardened composition has excellent resistance against many acids, alkaline media, inorganic salts and number of organic liquids such as diesel fuel, gasoline, paraffin oil, etc.

# 3. Physical and mechanical parameters

#### Requirements / results according to EN 13813

Properties	Declared value or class
Reaction to fire	F
Indentation hardness	IC10

#### Physical and mechanical parameters

Color	black
Dry matter content (obj. %)	> 90
Density (g/cm <sup>3</sup> )	1.48
Minimum temperature for application (°C)	7
Dried out under 20°C (hours)	1.5
Completely hardened under 20°C (days)	7

# 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

EN ISO 9001; EN ISO 14001; ISO 45001

<u>Base</u>. 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 28 days old at least and moisture of the base should not exceed 6%.

Base priming. If the base is porous and it is desirable to strengthen it, it is recommended to apply priming agent **BETOLIT KP** (see technical datasheet of **BETOLIT KP**).

Priming coat is applied by a roller or brush using approximately 100 to 150 g/m<sup>2</sup> in dependence on the absorbability of the base. Priming coat should not create any glossy film on the concrete surface.

When <u>applying on cast iron or steel</u> 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.

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

BETOLIT ED	component A (weight parts)	component <b>B</b> (weight parts)
	18	1

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).

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Under temperatures below + 15 °C it is necessary let the material sit at least for 24 hours under temperature between +15 °C and +20 °C prior to the application.

<u>Workability</u>. Workability of the prepared composition is at least 2 hours 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 + 7°C and above + 30°C.

<u>Application of the composition is usually done in two or three layers using roller, brush or spray.</u> Technical break between the layers is about 3 hours under 20 °C. This break can be shortened by increasing the temperature (e.g. by heating in the place of application). The material is fully hardened after 7 days after the application, it can be stressed after 24 hours under 20 °C

Tools can be cleaned by the agent **BETOFIL R** prior to hardening of the composition. Hardened composition can be removed only mechanically.

### 6. Specific consumption

Spreading capacity (specific consumption) of the **BETOLIT ED** amounts to ca 0.6 ÷ 0.9 kg/m<sup>2</sup> for two layers coating (with 0.2 mm of layer thickness).

#### 7. Packing and storage

**BETOLIT ED** component **A** is supplied in tin containers of 9 kg, component **B** is supplied in tin containers of 0.5 kg.

The shelf life of the product in original undamaged packing is 6 months. Store under temperatures between +5 °C and +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 ED** 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 ED** 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

<b>CE</b> 1301		
BETOSAN s.r.o. Na Dolinách 28, 147 00 Prague 4		
07		
7-18/072013		
EN 13813:2002 AS - IC10		
BETOLIT ED		
Two-component epoxy-based protective coating with modifying bituminous component		
Reaction to fire	F	
Indentation hardness	IC10	

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