



Two-component water-soluble coating system on the basis of low molecular modified epoxy resin

1. Product characteristics

Two-component water-soluble coating system on the basis of low-molecular modified epoxy resin intended for protection and surface finish of concrete and concrete structures as well as for surface finish of cement and polymer cement repair mortars and cement and lime-cement plasters. Meets the requirements EN 13813.

- supplied in specified ratio of each component; no measuring in-situ required
- coating can be applied on wet surfaces
- makes an aesthetically desirable surface finish
- highly abrasion-resistant
- permanently resistant to effects of aggressive acidic and alkaline medias, oils, oil products, etc.

2. Use

EPOLIT W is a two-component water-soluble epoxy composition, intended for protective coating of concrete and reinforced concrete structures as well as for surface finishing of cement and polymer cement repair mortars and cement and lime-cement plasters and stuccoes. It is used especially in places, where enhanced resistance of building structure surface to effects of aggressive media, absolutely dustproof surfaces, washability, etc. are required. It is compatible with the permanently flexible spread coating **WATERFIN PV**.

3. Physical and mechanical parameters

Requirements / results according to EN 13813

Properties	Declared value or class
Reaction to fire	F
Abrasion resistance according to BCA	AR 2
Adhesion	B2.0
Impact resistance	IR min. 10 Nm
Compressive strength	C50
Tensile bending strength	F30

Physical and mechanical parameters

hardened composition				
Drying-out – stage 1		5 hours		
– stage 2		24 hours		
Appearance		matte		
Color		RAL shades*) 1013, 6010, 6019, 6021, 6032, 7023, 7032,		
Pendulum hardness after 14 days (%)		> 35		
Adhesion to concrete base (MPa)		> 2		
Absorbability (7 days, 23 °C) (%)		< 0.8		
chemical resistance				
5 % NaOH	5 % NaCl	5 % HNO ₃	mineral oils	diesel fuel
permanently	permanently	short-term	permanently	permanently

*) RAL shades precision can be guaranteed only for orders of 400kg and higher

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 coat to the base (fats, greases, oils, etc.). Tensile strength of surface layers of the base shall be 1.5MPa at least. Corroded reinforcement and visibly damaged



concrete shall be properly repaired. When coating is applied, the new concrete shall be 28 days old at least and moisture content of the base should not exceed 8%.

Surface priming. The first step before the coating application should be priming of the surface. The surface is primed with diluted **EPOLIT W** composition in this ratio:

EPOLIT W component A	5 weight parts
EPOLIT W component B	1 weight parts
water *)	0.5-1.5 weight parts

*) amount of water added depends on the absorbability of the base

Primer is applied preferably by a roller or, possibly, a brush in amount of ca 100 ÷ 150 g/m² in dependence on absorbability of the base. Primer should not create a film on the concrete surface.

The composition is prepared by mixing well components A and B in specified a ratio. The mixing ratio is the following:

EPOLIT W component A	5 weight parts
EPOLIT W component B	1 weight parts

Components A and B shall be well mixed in a vessel of sufficient size by an electric driven slow speed propeller agitator.

Workability. Workability of prepared composition depends to certain extent on ambient temperature. The prepared composition is workable for 60 minutes under 20 °C. Keep in mind that the workability is significantly shortened under rising temperature. The prepared composition shall be efficiently protected against desiccation. It is also recommended to mix it from time to time.

Neither temperature of the base nor temperature of ambient air shall be below + 5 °C and above + 30 °C.

Application of the coat. The first step is penetration of the base. Penetration is applied preferably by a roller or, possibly, a brush in quantity amounting to approximately 100 - 150 g/m² in dependence on absorbability of the base.

After 24 hours **EPOLIT W** is applied in two layers preferably by a roller, or by a brush in amount of ca 300 - 350 g/m² at one layer. If you apply **EPOLIT W** by spraying, it is desirable to adjust its consistence by water in amount to 25 %.

Dilution. The composition can be diluted by drinking water or water with similar quality, if any. Working aids and tools shall be washed in warm water with added detergent immediately after completion of work. It is also possible to use acetone for perfect cleaning of tools and aids.

6. Specific consumption

Specific consumption of the **EPOLIT W** primer amounts to 0.1 ÷ 0.15 kg/m² in dependence on roughness and absorbance of the base.

Specific consumption of the **EPOLIT W** coat amounts to 0.3 ÷ 0.35 kg/m² per one layer in dependence on the roughness of the base. This consumption ensures that the hardened film is approximately 120 - 150 mm thick.

7. Packing and storage

EPOLIT W component A is supplied in cans of 10 kg, component B is supplied in cans of 2 kg. RAL

The shelf life of the product in original undamaged packing is 24 months. The product must be efficiently protected against frost during storing and manipulation.

8. Health protection at work

Work with a two-component system **EPOLIT W** 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.

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

CE 1301	
BETOSAN s.r.o. Na Dolinách 28, 147 00 Prague 4	
07	
7-6/072013	
EN 13813:2002 SR-C50-F30-B2-AR2,0-IR10	
EPOLIT W Coating system on the basis of low molecular modified epoxy resin	
Reaction to fire	F
Abrasion resistance according to BCA	AR 2.0
Adhesion	B2.0
Impact resistance	IR min. 10
Compressive strength	C50
Tensile bending strength	F30

Technical Data Sheet No. 7-6
Issued 1.1.2019

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