

Technical Data Sheet No. 7-13

EPOLIT W



Two-component watersoluble 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 plasters and stuccoes.

- Supplied in specified rate of particular components; no weighting in-situ is needed,
- coating can be applied to moist bases (up to 8%),
- provides aesthetically desirable surface finish,
- highly abrasion resistant,
- permanently resistant to aggressive effect of number of acid and alkaline media, oils, oil products, etc.

2. Use

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

3. Physical and mechanical properties

Hardened composition

Drying-out	- stage 1 - stage 2	5 hours 24 hours			
Appearance		matte			
Color		shades RAL 1013, 6010, 6019, 6021, 6032, 7023, 7032			
Impact pendulum hardness after 14 days (%)		>35			
Adhesion of concrete base (MPa)		>1			
Absorbance (7 days, 23° C) (%)		<0,8			

Meets requirements of norm EN 13813.

Chemical resistance

5% NaOH	5% NaCl	5% HNO3	mineral oils	Diesel oil
permanent	permanent	temporarily	permanent	permanent

4. Test certificates

The product is certified according to Act no. 22/1997 Coll. and Governmental Decree no. 163/2002 Coll. Continuous independent quality control is provided by accredited testing laboratory no. 095/2002, Horský s.r.o.. The authorised entity no. 204 provides quality system supervision.

5. Pinstruction 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,



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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 of the base should not exceed 8%. **Penetration of the base.** The first step, which precedes the finishing coat itself, is penetration of the base. The composition **EPOLIT W** diluted in the following rate is used for penetration.

EPOLIT W - component A	5 weight parts
EPOLIT W - component B	1 weight parts
water *)	0,5 - 1,5 weight parts

^{*)} Water quantity depends on absorbance of the base

Penetration is applied preferably by a roller or, possibly, a brush in quantity amounting approximately to $100 \div 150 \text{ g/m}^2$ in dependence on absorbance of the base. Penetration may not create any film on the concrete surface. This **composition is prepared** by proper mixing of components A and B in specified rate. The mixing rate is the following:

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

Components A and B are mixed in a sufficiently voluminous vessel by an electrically driven low-speed propeller agitator.

Workability: Workability of prepared composition depends to certain extent on ambient temperature. The prepared composition is workable 120 minutes under 20 °C. 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 + 5C and above + 30C.

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 $100 - 150 \text{ g/m}^2$ in dependence on absorbance of the base.

EPOLIT W is applied in two layers with technological break of 24 hours. It is applied preferably by a roller or, possibly, a brush in quantity amounting to approximately $300 - 350 \text{ g/m}^2$ per one layer. If **EPOLIT W** is applied by spraying, it is practical to adjust its consistence by water in quantity up to 25%.

Open time: After mixing the socalled open time of both penetration and coating is max. 120 minutes under 20C. It is necessary to take into account that the open time is significantly reduced with increasing temperature.

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 penetration **EPOLIT W** amounts to 0,1 \div 0,15 kg/m² in dependence on roughness and absorbance of the base.

Specific consumption of the coat **EPOLIT W** amounts to $0.3 \div 0.35 \text{ kg/m}^2$ per one layer in dependence on roughness of the base. This consumption ensures that the hardened film is approximately 120 - 150 m thick.



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7. Packaging and storage

The **EPOLIT W** component A is packed into 10 kg PE buckets, the **EPOLIT W** component B is supplied in 2 kg PE buckets. The shelf life of the product in original intact packing is 6 months. During storage and handling it is necessary to avoid freezing of the product.

8. Health protection at work

Work with the 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 Standard CSN 64 1301. 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 warmish wa-ter and soap and treat it by a suitable reparative cream.

EPOLIT W is the combustible matter of class IV. from fire safety point of view.

The TPD 35-98/BET is valid for this product. Data printed in this technical data sheet are based on knowledge and information available to the manufacturer at the time of publishing. This technical data sheet loses its validity by issuance of the new updated technical sheet. Contact the manufacturer in case of doubts or uncertainties and if needed!

The manufacturer is not responsible for any damages caused by improper use, incorrect application or nonadherence to prescribed technological procedure.

It is available, along with other information, at our Technical Department or at www.langeproon.ee or www.betosan.cz.

Issued: June 2017

