

## Single-component, permanently flexible protective and anti-carbonization paint for concrete

### 1. Product characteristics

Single-component, permanently flexible protective coating based on aqueous styrene-acrylate polymeric dispersion of fine-grain mineral fillers, special additives and pigments. Meets the requirements of EN 1504-2.

- supplied as a single-component product
- has excellent workability, can be applied by brush a roller or a spray gun
- has enhanced carbon dioxide penetration resistance
- highly flexible and ductile even at temperatures below zero
- has the ability to overlap cracks in the base
- permanently UV radiation resistant
- waterproof
- permanently frost resistant
- perfect adhesion to base

### 2. Use

**FLEXICOAT** is a single-component, permanently flexible, waterproof painting material intended especially to protect concrete and reinforced concrete from atmospheric effects and carbonization. It provides good protection for dynamically loaded concrete structures and to protect and repair surfaces damaged by growing hairline cracks. After curing, it provides permanent resistance to water and all atmospheric effects, shows excellent resistance to UV radiation.

### 3. Physical and mechanical parameters

Requirements / results according to EN 1504-2

	Testing method	Requirements	Results
Permeability to CO <sub>2</sub>	EN 1062-6	s <sub>D</sub> > 50 m	s <sub>D</sub> > 110 m
Permeability to water vapor	EN ISO 7783-1	Class I: s <sub>D</sub> < 5 m	s <sub>D</sub> < 3 m
Capillary absorption and permeability to water	EN 1062-3	< 0.1 kg/m <sup>2</sup> h <sup>-0.5</sup>	< 0.05 kg/m <sup>2</sup> h <sup>-0.5</sup>
Adhesion (pull-off test)	EN 1542	≥ 0.8 MPa	≥ 1.3 MPa
Adhesion after thermal compatibility Freeze salt cycling with de-icing immersion	EN 13687-1	no bubbles, cracks and delamination ≥ 0.8 MPa	pass ≥ 0,9 MPa
Crack-bridging ability	EN 1062-7		Class A2 (-30 °C) Class B2 (-30 °C)
Artificial weathering	EN 1062-11	no blistering, cracking and flaking	pass

### Physical and mechanical parameters

Color of paint	RAL grey 7032
Content of non-volatile substances (%)	58 ± 2
Tensile strength (MPa)	> 1.2
Elongation at break (%)	> 150
Water-tightness 120 min (l/m <sup>2</sup> )	0.0

### 4. Test certificates

Meets the requirements of EN 1504-2, and TP ŘSD Sec. 31. and TP SSBK III.

The product is certified according to Act no. 22/1997 Coll. and the Regulation (EU) no. 305/2011 (CPR).

Continuous independent control of production quality ensures the AZL 1687 LABBET®.

Supervision of quality management system, relation to the environment system and occupational health and safety system performs the certification body no. 3029.

### 5. Instruction for preparation and application

The base must be adequately cohesive, free of impurities and possible residual degraded coatings. Local defects should be filled in. Local uneven spots of the surface should be free of sharp edges.

Preparation of the paint **FLEXICOAT** is supplied as a single-component system. Its preparation for application consists simply of mixing with a suitable manual mixer or a slow-speed electric propeller mixer. The mixed material should be protected from drying by sealing the bucket.

Application The paint is applied to a suitably prepared substrate with a brush, roller or spray gun in two layers. In dependence on absorbance and moistness it is desirable to use **FLEXICOAT fixativ** for the base penetration. Dry and absorbent substrates require penetration. Interval between applying next layer should be at least 12 hours. The paint is drying out for about 4 hours.

Neither temperature of the base nor temperature of ambient air shall be below + 5 °C and above + 35 °C.

## 6. Specific consumption

For standard two-layer coating system the spreading capacity (specific consumption) amounts to 0.3 – 0.6 kg/m<sup>2</sup>, while final thickness of the coating should be ca. 150 – 200 µm.

## 7. Packaging and storage

**FLEXICOAT fixativ** is supplied in PE buckets of 10 kg net capacity. The product should be stored in original packaging at temperatures from +5 °C to + 35 °C. The storage life of the product in original intact packing is 6 months.

## 8. Health protection at work

Work with **FLEXICOAT fixativ** penetration paint does not require any special hygienic precautions. The material does not contain harmful substances. Standard rules of hygiene are to be complied with at work; gloves and protective clothing should be worn. Upon contact with skin and/or mucous membranes the affected areas should be washed or rinsed with running water. Medical help must be sought in case of accidental ingestion.

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 (para. 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](http://www.betosan.cz).



## 11. CE marking

 1301	
<b>BETOSAN s.r.o.</b> Na Dolinách 28, 147 00 Prague 4	
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2-17/072013	
EN 1504-2:2004	
<b>FLEXICOAT</b> permanently flexible protective and anti-carbonization paint for concrete	
Permeability to CO <sub>2</sub>	s <sub>D</sub> > 110 m
Permeability to water vapor	class I: s <sub>D</sub> < 3 m
Capillary absorption and permeability to water	< 0.05 kg/m <sup>2</sup> h <sup>-0.5</sup>
Adhesion (pull-off test)	≥ 1.3 MPa
Adhesion after thermal compatibility	pass
Freeze salt cycling with de-icing immersion	≥ 0,9 MPa
Crack-bridging ability	Class A3 (-20 °C)
Artificial weathering	pass
Reaction to fire	euroclass A2
Dangerous substances	comply with 5.3

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