

# DENSOTOP XP



Mineral dry shake for surface protection and sealing of industrial concrete floors with content of XYPEX CONCENTRATE DS 1

## 1. Product characteristics

- meets the requirements of EN 13813
- dry single-component powder product
- high content of abrasion resistant fillers
- due to secondary crystallization not only surface layers are sealed but also entire cross-section of concrete floor acquires water tightness and liquid tightness
- surface is dust-proof and non-skid
- properly worked up dry shake provides aesthetically desirable floor surface
- significantly enhanced chemical resistance of the floor
- floor surface can be colored en masse; no risk of color shade change

## 2. Use

The **DENSOTOP XP** mineral dry shake is intended for surface finishing of industrial concrete floors during concrete placement. **DENSOTOP XP** is intended for extremely heavy-duty floors. Its abrasion value tested according to Böhm is lower than  $2.5 \text{ cm}^3/50 \text{ cm}^2$ . It is especially used in stores of environmentally hazardous liquid products (oils, coating compositions, diluents, etc.). Besides floors, it is practical for surface finishing of handling areas, bottoms of retention tanks and breakdown emergency sumps, etc. Besides extraordinary abrasion resistance, the properly worked up dry shake provides waterproofing sealing of concrete due to secondary crystallization in the porous system of concrete, which results in enhanced resistance to corrosion. The floors also have aesthetically desirable appearance. The floors are completely dust-free. The floor surface is also non-skid.

## 3. Product composition

The **DENSOTOP XP** mineral dry shake is manufactured on the basis of high quality fine ground Portland cement and abrasion resistant filling agents having precisely set granulometry on the basis of silicon dioxide, aluminum oxide and silicon and aluminum carbides. Besides, the mineral dry shake contains necessary quantity of special formulated chemical additive XYPEX CONCENTRATE DS 1 evoking growth of crystalline neoplasm not only in the porous system of surface finishing but also concrete base. Besides the standard grey (natural), the product can be supplied in red, green and brown colors. The dry shake is also supplied on the basis of particular order in any shade chosen according to the sampler of alkali resistant pigments of the BAYER Company, which are specified for mixing with grey cement. The product contains no toxic components and is incombustible. Content of water-soluble chlorides is lower than 0.01%.

## 4. Test certificates

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. Product batching

Batching of the dry shake depends on degree of floor load and ranges from 4 to 5.5 kg per  $1 \text{ m}^2$  of the floor according to TABLE I.

**TABLE I Recommended batching of the dry shake in dependence on expected degree of floor load**

Floor load	light-duty <sup>+) </sup>	medium-duty <sup>+) </sup>	heavy-duty <sup>+) </sup>
<b>DENSOTOP XP</b>	4 kg/m <sup>2</sup>	4.5 kg/m <sup>2</sup>	5.5 kg/m <sup>2</sup>

<sup>+)</sup>  light-duty = abrasion  $\geq 5 \text{ cm}^3/50 \text{ cm}^2$  medium-duty = abrasion  $5+2.5 \text{ cm}^3/50 \text{ cm}^2$  heavy-duty = abrasion  $\leq 2.5 \text{ cm}^3/50 \text{ cm}^2$

**Degree of load based on prevailing mechanical load, DIN 18 560, Volume 7, Table 1**

Degree of load	Transport, conveyance equipment Type of footwear <sup>1) </sup>	Load caused by production process and pedestrian traffic, examples:
I (heavy-duty)	Steel and polyamide	Working, hauling and rolling of metal elements, unloading of goods by metal pitchfork, pedestrian traffic of more than 1,000 persons a day
II (medium-duty)	Polyurethane - elastomer and rubber	Hauling and rolling of wood, paper rolls and plastic elements, pedestrian traffic from 100 to 1,000 persons a day
III (light-duty)	Elastic and air-lock footwear	Assemblies on work benches, pedestrian traffic of less than 100 persons a day

1) Clean footwear only, hard substances, dirt and impurities cleaved to footwear increase load

6A

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## 6. Physical and mechanical properties

### Requirements / results according to EN 13813

Properties	Declared value or class
Reaction to fire (Class)	A1 <sub>fl</sub>
Compressive strength (Class)	C60
Tensile bending strength (Class)	F7
Abrasion resistance (Class)	A3

## 7. Packing and storage

The dry shakes are supplied as dry single-component pulverized products packed into 25 kg paper bags with PE lining. During transport and storage **DENSOTOP XP** shall be efficiently protected against moisture. The storage life of the product in original intact packing is 3 months.

After the expiration of min. shelf life, which is stated on the packaging, ingredients are not fully effective at reducing chromium VI below 2 ppm.

## 8. Instructions for preparation and application

Preparation and application follows applicable technological instruction for processing of **DENSOTOP** dry shake.

## 9. Health protection at work

No extraordinary sanitary measures are necessary while working with the dry shake **DENSOTOP XP**. It is necessary to avoid especially contamination of eyes and mucous membranes because the product contains alkaline components. When working, the regulations on health protection at work concerning work with cement or lime mortars shall be observed.

In case of eye contamination it is necessary to rinse the eyes with clean water and immediately seek medical attention. If accidentally swallowed, induce vomiting and immediately seek medical attention. In case of skin contact, it is necessary to wash thoroughly with soap and water and treat with a suitable reparation 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 (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 are orders 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 Praha 4	
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6A-3/072013	
EN 13813:2002	
CT-C60-F7-A3	
<b>DENSOTOP XP</b> Dry shake hardener	
Reaction to fire	A1 <sub>fl</sub>
Release of corrosive substances	cement material
Water permeability	NPD
Water vapor permeability	NPD
Compressive strength (Class)	C60
Tensile bending strength (Class)	F7
Abrasion resistance (Class)	A3
Sound isolation	NPD
Sound absorption	NPD
Thermal resistance	NPD
Chemical resistance	NPD

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6A

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