TRIOCOAT ABRASIVE 4600

Modified epoxy material

MATERIAL DESCRIPTION:

Two-component epoxy material with polyamine curing, containing lamellar pigments.

COATING PURPOSE:

Abrasion-resistant coating resistant to spills of oil and petroleum products, non-concentrated solutions of acids, alkalis, salts, intended for anti-corrosion protection in the factory manufacture of metal structures, products and various equipment operated in industrial and marine atmospheres, alternating wetting and immersion zones, petrochemical facilities, ports, offshore and marine projects. The coating is capable of post-curing under water, so immersion in water is allowed soon after application. It is used:

- as a standalone coating;
- with overcoating with polyurethane paint and coating materials in complex anti-corrosion protection systems;
- as part of a special non-slip coating, as a floor coating, on routes for the movement of people and cargo.

The operating temperature in the coating system is from minus 60 to 120 °C.

PHYSICAL CHARACTERISTICS:

Color: Grey.

Volume solids (%, by volume): 85±5

Recommended thickness of one coat:

Film thickness	WFT, µm	DFT, µm
Minimum	120	100
Maximum	350	300

It is recommended to obtain the operational coating thickness in 2 or 3 coats.

When used as a non-slip floor coating:

The composition of the coating system is as follows:

Material name	WFT, µm	DFT, µm
TRIOCOAT ABRASIVE 4600	590	500
Abrasive filler *	—	—
TRIOCOAT ABRASIVE 4600	590	500
Acrylic polyurethane materials TRIOTOP FINISH	110	50

Note: * — Abrasive filler micromarble Fenix (0.5–2.0) mm (TU 08.12.12-001-45665168-2019) or another in agreement with O3-Coatings LLC must be evenly distributed over the surface of the first coat of TRIOCOAT ABRASIVE 4600. The application technology is according to TI No. 2413/68.

Drying time and overcoating interval:

Drying time at DFT 200 µm				
Surface temperature	**5 °C**	**20 °C**	**30 °C**	**40 °C**
Drying to degree 3 (GOST 19007)	24 h	8 h	6 h	4 h
Drying to degree 6 (GOST 19007)	72 h	24 h	16 h	10 h
Drying to application of the next coat — minimum	26 h	9 h	7 h	5 h
maximum	6 months			

After curing of the coating to degree 3, immersion of the painted structures in fresh water is allowed; after curing to degree 6 — in fresh and sea water.

SURFACE PREPARATION:

The material is applied to a prepared metal surface. A typical preparation process includes the following operations: elimination of surface defects to P2 (for operation under corrosivity from C1 to C4 according to ISO 12944-2) or P3 (for operation under corrosivity C5 according to ISO 12944-2) according to ISO 8501-3; degreasing of the surface (if necessary); surface cleaning to grade Sa 2.5 according to ISO 8501-1; during repair and painting of small areas, the use of manual and mechanized cleaning methods to grade St3 according to ISO 8501-1 is allowed; desalting of the surface (if necessary); dust removal of the surface to degree 2 with a particle size of not more than class 2 according to ISO 8502-3. The prepared surface must be dry, and its temperature must be at least 3 °C above the dew point.

APPLICATION:

Material preparation:

The material is two-component; before application, the base and the hardener must be mixed separately. The mixing ratio of the base and hardener to obtain a ready-to-apply mixture is 5 : 1 (by volume) (100 : 13.3 by weight). Pot life: 1 h at 20 °C.

Application method:

Airless spraying / Manual application.

Thinner:

Thinner TRIOSOLV 0002 (if necessary), up to 10 % by volume for airless spraying. For more detailed information, contact O3-Coatings.

Nozzle diameter (recommended):

.019"–.025"

Operating pressure (recommended):

Not less than 150 bar.

Equipment cleaning:

TRIOSOLV 0002 (other solvents may be used in agreement with O3-Coatings).

Environmental parameters during application:

Parameter	**Value**
Air temperature	From plus 5 to plus 30 °C
Relative air humidity	10–85 %

In closed rooms, provide supply-and-exhaust ventilation in the appropriate volume for the period of application and drying.

RECOMMENDED SYSTEMS:

Previous coat: none.

Subsequent coat: none or polyurethane paint and coating materials, for example TRIOTOP FINISH 5700.

Note: For this product, as for all epoxy materials, chalking is characteristic during operation without a finish coat outdoors.

STORAGE:

24 months from the date of manufacture. It is recommended to store in a dry dark place in sealed factory packaging at a temperature from 0 to plus 30 °C, avoiding direct exposure to UV rays and other heat sources.

TRANSPORTATION:

It is recommended to transport at a temperature from 0 to plus 30 °C, avoiding direct exposure to UV rays and other heat sources. Transportation at negative temperatures down to minus 40 °C for a duration of 14 days is allowed.

PACKAGING:

Base — 20 l euro pail; Hardener — 5 l euro pail.

HEALTH AND SAFETY:

Refer to the Safety Data Sheet for the material.