TRIOCOAT HS 4711

Epoxy coating

MATERIAL DESCRIPTION: Two-component epoxy coating with polyamide curing and high molecular weight.

COATING PURPOSE: Used as a primer in epoxy and polyurethane paint systems; provides high corrosion resistance of the coating (with an operating temperature up to plus 120 °C). It can be used for well-prepared surfaces of carbon, stainless and galvanized steel, steel with shop primer, aluminium, as well as surfaces with zinc metallization. Recommended for painting commercial transport, municipal and special equipment, mining and other equipment.

PHYSICAL CHARACTERISTICS:

Color: Grey, red-brown.

Volume solids: 65±5 %

Theoretical spreading rate: 0.138 l/m² at DFT 90 µm.

Coating thickness:

Wet and dry film thickness table

Film thickness	WFT, µm	DFT, µm
Minimum	120	80
Maximum	380	250
Recommended	140	90

Drying time:

Drying time at DFT (85–90) µm				
Surface temperature	**0 °C**	**10 °C**	**20 °C**	**35 °C**
Drying to degree 3	16 h	9 h	5 h	2 h
Drying to application of the next coat: primers TRIOCOAT HS 4711 or another coat of the coating system (minimum)	16 h	9 h	5 h	2 h
maximum	6 months			
Drying to hard film (to degree 5, GOST 19007)	24 h	11 h	7.5 h	4 h
Drying "for canting" (to degree 7, GOST 19007)	29 h	18 h	12 h	5 h

Drying time is determined by the actual DFT. The drying times given in this section are for guidance only. When assessing the actual drying time, it is also necessary to take into account the presence of air flows and relative air humidity.

SURFACE PREPARATION: The material is applied to a prepared and dry metal surface with a temperature at least 3 °C above the dew point. The preparation process includes the following operations: elimination of surface defects to P3 according to ISO 8501-3; degreasing of the surface (if necessary; recommended solvent — R4); surface cleaning of carbon steel to grade Sa 2.5 according to GOST R ISO 8501-1-2014 with a recommended roughness profile of 50–75 µm; during repair, local cleaning P St 3 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.

APPLICATION:

Material preparation: The material is two-component; before application, the base and the hardener must be mixed separately. Mixing ratio 4 : 1 (base : hardener) by volume, with thorough stirring to a homogeneous mass.

Pot life: 4 h at plus 23 °C.

Application method: Airless spraying / Pneumatic spraying / Manual application.

Thinner: Thinner TRIOSOLV 0002 (if necessary), up to 5 % by volume for airless spraying, up to 12 % by volume for pneumatic spraying. For more detailed information, contact O3-Coatings.

Nozzle diameter (recommended):

- for airless spraying: .015"–.019"
- for pneumatic spraying: (1.7–2.0) mm

Operating pressure (recommended):

- for airless spraying: not less than 150 bar
- for pneumatic spraying: (1.7–2.0) bar

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

Environmental parameters: Air temperature not lower than minus 10 °C; relative air humidity not higher than 85 %.

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

RECOMMENDED SYSTEMS:

Previous coat: Predominantly — without a previous coat. Possible: epoxy coatings, zinc silicate coating. For more detailed information, contact O3-Coatings.

Subsequent coat: Acrylic coating, epoxy coating, polyurethane coating. For more detailed information, contact O3-Coatings.

STORAGE:

Base — 48 months from the date of manufacture. Hardener — 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.

NOTE:

Small deviations of the numerical values of physical quantities are permissible.

TRANSPORT PACKAGING:

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

HEALTH AND SAFETY:

Refer to the Safety Data Sheet for the material.