Technical Data Sheet

TRIOTEMP 400

Zinc-silicate coating, 2K

DESCRIPTION:

A fast drying, two-component ethyl silicate based material with a zinc dust content equal to or greater than 85% by weight in dry film, meeting the performance requirements of SSPC Paint 20 (Level 1, Type I) and ISO 12944-5: 2018.

TYPE AND RECOMMENDED USE:

To protect the steel surfaces from atmospheric loads and high temperatures (up to +400 °C).

PHYSICAL CHARACTERISTICS:

Color:

Grey.

Volume solids:

60±2 %

Theoretical spreading rate:

0,100 ltr / м^2, at DFT 60 microns.

Film thicknesses:

Typical thicknesses

Film thicknesses	WFT, microns	DFT, microns
Minimum	100	60
Maximum	133	80

Drying time and overlap interval:

Drying time at a DFT of (60-80) µm		
The temperature of the surface to be painted	5 °C	23 °C
Drying to tack	40 min	20 min
Dry before applying the next layer		
minimum	after 7 days (at RH 90% or humidification of surfaces)	After24 hours (at RH above 80% or humidification of surfaces)

Before applying the next layer make sure that dried primer layer TRIOTEMP 400 withstands the light rubbing of the rag moistened in MEK (ASTM D4752, MEK resistance, (4-5) points). Materials for galvanized surfaces are recommended for further layers.

SURFACE PREPARATION:

The material is applied to the prepared and dry metal surface. The process of preparation includes the following operations: elimination of surface defects to P2 ISO 8501-3; degreasing surface (if necessary; recommended solvent – P 4); surface cleaning to the extent Sa $2^1/_2$ according to GOST R ISO 8501-1, the surface profile after cleaning should be medium roughness (comparator "G"), see ISO 8503-2, recommended surface roughness Rz – (40-100) microns

APPLICATION DETAILS:

Material preparation:

The material is two-component. Mixing ratio: 1: 3 by weight (binder : zinc powder).
To avoid the formation of lumps when mixing the components - do not add a binder to the zinc powder!

	Mix the binder thoroughly until complete uniformity is achieved. Gradually add the zinc powder to the binder container while constantly stirring the mixture with a mechanical mixer, maintaining a low mixing speed. At the end of the mixing process, thoroughly stir the zinc powder in the binder with a high-speed agitator until a homogeneous mixture is obtained. During application, it is necessary to constantly mix the working mixture at a low speed, for example, using a separate dedicated pump.
Application method:	Airless spraying/ pneumatic spraying. Brush – only for touch-up and repair
Pot life:	8 h at 20 °C
Thinner:	TRIOSOLV 0002 – (0 – 10) % vol., depending on the required thickness and application conditions. For more information, please contact O3-Coutings LLC.
Nozzle size:	- For airless spraying - .011” - .019”. - For pneumatic spraying - (1,7 - 2,0) mm
Operation pressure:	- For airless spraying (at the pump outlet) – at least 150 bar. - For pneumatic spraying (pressure at the inlet of the spray gun) – at least 2,0 bar
Cleaning of tools:	Thinner TRIOSOLV 0002 (you may use other thinners approved by the company LLC "O3-coatings").
Environmental conditions:	The air temperature is not below plus 5°C; The relative humidity of the air is within (60-90) %. At a relative humidity below 80%, it is recommended to moisten the surface to be painted approximately 1 hour after painting by pouring water under low pressure. Wetting should be repeated every hour for several hours.
STORAGE:	6 months for binder and 24 months for zinc dust. It is recommended to store in a dry, dark place in the sealed factory packaging at temperature from 0°C to plus 30°C with no direct exposure to UV rays and other heat sources.
TRANSPORT PACKAGING:	10 ltr containers.
HEALTH AND SAFETY:	Read the Safety Data Sheet for material.