

SOS-TC6160 Silicone-based Heat Resistant Topcoat (600°C)

Product Description

SOS-TC6160 is a 1k self-curing and heat-resistant topcoat composed of silicone resin, aluminum paste, heat-resistant pigments and fillers and additives.

Thinner: ZSX1310

Typical Use

It is suitable for high-temperature protective on surfaces of equipment in petrochemical, metallurgy, aviation, and power industries, withstanding temperatures up to 600°C. Typical applications include steel blast furnaces, outer surfaces of hot blast stoves, high-temperature chimneys, flues, high-temperature gas pipelines, heaters, and heat exchangers. Crosslinking and curing require exposure to a high temperature of at least 200°C. Prolonged use at high temperatures may cause discoloration, but this does not affect its protective properties.

Physical Parameter

Color available	Gray, Aluminum, Black and customized.
Gloss	≤ 10
Flash Point °C	25
VOC (g/L)	522
Volume Solids	$40 \pm 2\%$
Dry film Thickness(μm)	25
Density (g/ml)	1.40
Theoretical Coverage	16.0 m ² /L, 11.43 m ² /kg

Substrate Preparation

- (1) The surface of substrate should be clean and dry, free from oil, dust, zinc salt and other contaminations
- (2) Steel surfaces are blast cleaned to Sa 2½ (ISO 8501-1: 2007)
- (3) Roughness Ry5: 25~50 μm , fine to medium(G) (ISO 8503-2), local touch-up, grinding to St3

Application Conditions

- (1) The substrate temperature must be at least 3°C above the dew point, with a relative humidity not exceeding 85%.
- (2) For applications in confined or enclosed spaces, increase ventilation during application and drying.
- (3) After spraying, the coating must undergo crosslinking and curing at a high temperature of 200°C before being put into use, ensuring long-term resistance to temperatures up to 600°C.

Application

Methods	Air Spraying	Airless Spraying	Brush	Roller
Dilution	5~10%	0~5%	5~10%	
Nozzle	1.5~3.0mm	0.21~0.33mm	Suitable for small areas	
Pressure	0.3~0.4MPa	10MPa		

Drying Time

Temperature of substrate	5℃	10℃	23℃	40℃
Surface Dry Time	90Min	30Min	20Min	15Min
Full Drying Time	5H	3H	2H	1H
Min. Recoating Time	30H	24H	16H	8H

Recommended System

Inorganic zinc-rich primer

Storage

12 months in a dry, ventilated and cool place under sealed container, away from heat and fire.

For professional use only!