zandleven coatings

# Thermaguard® TC1200 siloxane

Thermaguard TC1200 is a single pack, inert multi polymeric matrix, heat resistant topcoating wich can be applied als a finishcoat on a Thermaguard CUI 300 or CUI 650 coating product/system, on Thermaguard SAL 600 or any other anorganic zincrich primer. For atmospheric, maritime and offshore condtion, like process industry, platform, power plants etc.

- Color fastness at elevated temperature
- Drying and hardening will take place at room temperature
- Damage due to transportation will be reduced
- To apply on hot substrate, up to 130°C
- Application without shutdown
- No free silicone part, no silicone contamination

## Specific properties

- Heat resistant topcoat
- Resistant against cyclic thermal conditions at high temperature, from -196°C up to 650°C
- Cracking due to chloride exposure on stainless steel will be prevented
- Recoatable, regardless ageing, in accordance with application instructions

## Product information at 20°C

| | |
|---|---|
| Finish | Matt |
| Color | according TC1200 color map |
| Mass density | approx. 1.55 kg/L |
| Solids content by volume | approx. 58 volume % |
| VOC | approx. 335 gr./L (volatile organic compound) |
| Recommended film thickness | 60 micron wd.f.t.<br>105 micron w.f.t. w.f.t.<br>Above mentioned film thickness shouldn't be exceeded by more than 50%. |
| Theoretical spreading rate | At 60 µm d.f.t. 9.7 m²/L<br>At 80 µm d.f.t. 7.3 m²/L |
| Practical spreading rate | Depending on several factors like shape of object, profile of surface, method of application, application circumstances and experience.<br>A few guiding principles are:<br>Brush/roller 85-90% of the theoretical spreading rate<br>Spraying 50-70% of the theoretical spreading rate |
| Flashpoint ISO 1523 | Paint 30°C<br>Thinner BB 55 27°C<br>Thinner FF 55 41°C |
| Dry temperature resistance | -196°C up to +650°C |
| Shelf life | Material should be stored in a dry, shaded environment away from heat & ignition sources. Do not allow material to freeze. Shelf life is minimum 12 months at 23ºC. |

## Drying times

| For d.f.t. up to 80 µm | 35°C | 23°C | 10°C |
|---|---|---|---|
| Dust dry | 60 minutes | 2 hours | 6 hours |
| Manageable | 16 hours | 24 hours | 36 hours |
| Recoatable: | | | |
| Minimum interval | 6 hours | 8 hours | 24 hours |
| Maximum interval | Unlimited, provided that the surface is clean and dry. | | |
| | Film thickness, ventilation, temperature and relative humidity are of great influence on the drying times. | | |
| Application of the isolation | After 48 hours after the last layer has dried. | | |

## Application instructions

Application conditions

During the application and the hardening the temperature should be above 5°C.

The surface should remain dry and the temperature of the surface should at least be 3°C above dew point.

During application and hardening in closed or small spaces, it is necessary to refresh the air continually to remove the solvent vapours, this because of drying, health and safety.

## Usage information

| | Airless-spray | Airspray | Brush/roller |
|---|---|---|---|
| Type of thinner | BB 55 / FF 55 | BB 55 | BB 55 |
| Recommended thinner (depending on application and equipment) | 0 – 5 vol. % | 5 – 10 vol. % | 0 – 5 vol. % |
| Nozzle orifice | 0.38 – 0.43 mm<br>0.015 – 0.017 inch | 1.8 – 2.2 mm | |
| Nozzle pressure | 160 – 200 bar | 2 – 3 bar | |
| Maximum attainable d.f.t. | 80 µm | 60 µm | 50 µm |
| Cleaning of tools | Thinner BB 55 | | |

## Surface conditions

Steel

New steel:
The product can be applied on a recommended anti corrosion primer/system

Stainless steel

New stainless steel:
The product can be applied on a recommended primer/system

Repair and maintenance

Clean the surface thoroughly with a suitable cleaning preparation or by steam cleaning.

Remove salts and other water soluble impurity by spraying with clean tap-water under high pressure.

Remove rust a.o. by (water)blasting Sa 2½ or derust mechanical until St. 2-3, in accordance with ISO 8501-1:2007.

Apply the advised paint system on a clean surface.

- Mechanical or hand derusting gives less quality than (water)blasting
- and will result in less protection of the applied paint system.

## Application substrate temperature

Thinner BB55, from 10°C up tot 60°C
Thinner FF55, from 60°C up to 130°C

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## Ventilation precaution

| Minimum required quantity of air to comply with: | | |
|---|---|---|
| | IOELV(EU) | 10 % LEL |
| Thermaguard TC1200 | 1102 m³/L | 46 m³/L |
| Thinner BB 55 | 3935 m³/L | 165 m³/L |
| Thinner FF 55 | 1750 m³/L | 163 m³/L |

IOELV = Indicative Occupational Exposure Limit Values
LEL = Lower Explosion Limit
Also consult the security information sheets

## Additional and applicable information ( www.zandleven.com)

- General guidelines
- Material Safety Data Sheet
- information curing agents en thinners
- Color surcharge
- General terms and conditions of delivery