



Product Data Sheet

Transotherm 5.81

Product description.

A two pack top-coat for high temperature resistance based on Ethyl Silicate polymer. This product has been specially designed for application over inorganic zinc primers, which provides a single specification to be used for the protection of all pipework from corrosion at continuous operating temperatures up to 400°C and intermittent temperature surges up to 500°C.

Physical properties.

Colour/Texture	Grey/Matt
Volume Solids	66%
Specific gravity	1.57 gr/ml
VOC	293 grams/Liter
Flashpoint	>25°C

	Dry film thickness per coat (μ)	Wet film thickness per coat (μ)	Theoretical spreading rate (m ² /l)
Range	100 – 125	150 – 190	6.6 – 5.3
Recommended	125	190	5.3

Application data.

Mixing ratio By volume, base to hardener: 80 to 20

Potlife 23°C: 4 hours 30°C: 2 hours

Guiding data Airless spray Pressure. 120 - 150 bar. Nozzle size: 0.53 - 0.64 mm.
Spray angle: 40 - 80 degrees.
Volume of thinner: not recommended

Guiding data Airspray Pressure. 4 - 5 bar. Nozzle size: 1.8 - 2.2 mm.
Use equipment with a low speed agitator.
Volume of thinner: 0 – 5%.

Thinner/Cleaner Transocean IOZ Thinner 6.07.

Drying and recoating times (1).

Substrate conditions	Surface dry	Hard dry	Dry to recoat	
			Minimum (1)	Maximum (2)
10°C; 60% RH	2 hours	12 hours	Not applicable	Not applicable
23°C; 60% RH	2 hours	8 hours	Not applicable	Not applicable
30°C; 60% RH	1 hour	6 hours	Not applicable	Not applicable

(1) The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, preceding paint system etc

(2) TO 5.81 is meant to be used as a single coat over zinc silicate primer for the protection of pipework against temperatures up to 400°C. Consult your nearest Transocean office if recoating at lower operating temperatures is required.

Surface preparation.

Steel

Oil and grease should be removed by solvent cleaning according to SSPC-SP1. Apply Transotherm 5.81 always over zinc silicate primers or zinc based primers. If the zinc silicate primer shows extensive or widely scattered breakdown or excessive zinc corrosion it will be necessary that the surface area will be sweep blasted. Weld seams of damaged areas should be blast-cleaned to SA 2,5 and recoated with inorganic zinc primer. The surface area must be clean, dry and free from contamination and zinc salts before application of Transotherm 5.81 and the zinc primers must be fully cured before recoating.

Recommended paint system.

Transozinc Silicate Solventborne 1.52	1 x 75 μ dft.
Transotherm 5.81	1 x 125 μ dft.

Application conditions.

The temperature of the substrate should be at least 3°C above the dew point of the air. Temperature and relative humidity should be measured in the vicinity of the substrate.

The maximum recommended surface temperature is approx. 40°C. Higher steel temperatures are acceptable provided dry-spray is avoided by proper spray application and extra thinning if required. In extreme cases it may be necessary to reduce film thickness in order to avoid sagging.

When applying the paint in confined spaces, provide adequate ventilation during application and drying. The temperature of the mixed paint should be at least 15°C, otherwise extra solvent may be required to obtain a proper application viscosity.

Storage and shelf life.

The product must be stored in accordance with national regulations. The cans are to be kept in a dry, cool, well ventilated space and away from source of heat and ignition. Cans must be kept tightly closed.

Worldwide availability

The product is part of the common Transocean product range but local availability is subject to confirmation. Although we strive to supply the same product through the world, slight modifications of the product in some cases may be necessary in order to comply with local conditions and/or national regulations. In such cases an alternative datasheet will be issued.

Health and safety.

Observe the precautionary notices on the label of the container. A material safety data sheet is available upon request and national or local safety regulations should be followed. This product is intended for use by professional applicators.

As a general rule, avoid skin- and eye contact by wearing overalls, gloves, goggles, mask, etc. Spraying should be carried out under well-ventilated conditions. This product contains flammable materials and should be kept away from sparks and open flames. Smoking in the area should not be permitted.

Disclaimer

The information in this data sheet is provided to the best of our knowledge. However, we have no control over either quality or condition of the substrate and other factors affecting the use and application of this product. Therefore, we cannot accept any liability whatsoever or howsoever arising from the performance of the product or for any loss or damage arising from the use of this product. We reserve the right to change the product without notice.

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