RESICHEM 563 Siltherm 250 – high build insulative coating

Resichem 563 Siltherm 250 is a high build solvent-free low emissivity coating designed to reduce heat transfer from underlying metal surfaces thereby reducing heat loss and the risk of burns through personal contact.

- Solvent free silicon with high build capability
- Reduces surface temperatures from 250° (482°F) to below 55°C (130°F).
- Apply to process surfaces that are offline (5°C - 45°C/ 41°F - 113°F).

Typical applications

External pipe surfaces	Tank externals	Process vessels	Separators
Fan housings	Mixing vessels	Heat Exchangers	Ovens

Surface Preparation

Metallic Substrates – Mechanical abrasion

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be mechanically abraded using handheld grinders to ***ISO 8501/4 ST3 (SSPC SP3 ST3)***.
3. Once abraded, the surface must be degreased and cleaned using MEK or similar type materia1.
4. All surfaces must be coated before gingering or oxidation occurs.

Metallic Substrates – Hydro-blasting

1. All surfaces must be hydro-blasted using clean water at 12,000 psi (850bar) to ***NACE 5 (SSPC SP13 WJ3-WJ1)***.
2. All surfaces must be coated before gingering or oxidation occurs

Metallic Substrates – Abrasive blast cleaning

1. All oil and grease must be removed from the surface using an appropriate cleaner such as MEK.
2. All surfaces must be abrasive blasted to ***ISO 8501/4 Standard SA2.5 (SSPC SP10/ NACE 2)*** minimum blast profile of 75 microns (3mil) using an angular abrasive.
3. Once blast cleaned, the surface must be degreased and cleaned using MEK or similar type material.
4. All surfaces must be coated before gingering or oxidation occurs.

PLEASE NOTE: *For salt contaminated surfaces the substrate must be pressure washed with clean water and checked for salt contamination, please refer to the surface preparation and pre-application guide for further information.*

Priming – all surfaces

1. 589 Adhesion Promoter is single component material.
2. Shake the container prior to application.
3. Once opened apply the Resichem 589 Adhesion Promoter in a single coat using a brush or roller
4. The material should be applied very thinly avoiding flooding or ponding.
5. Reseal the container immediately after use.

Mixing

563 Siltherm 250 is a single component material prior to mixing please ensure the following:

1. The product is at a temperature between 15-25°C (60-77F°).
2. The ambient & surface temperature is above 5°C (41F°).

Once these 3 checks have been met, please proceed with mixing the product.

1. Agitate the product using an electric paddle mixer to ensure you have a consistent mix of silicon emulsion

Application

Brush or roller applications

1. Pour the material into a paint kettle or paint tray.
2. Apply the product to the prepared & primed metallic surface at a wet film thickness of 1-2mm (40-80mil).
3. Leave to cure for approximately 4 hours at 20°C (68F°) 65% humidity.
4. Apply a 2nd coat of material at 1-2mm (40-80mil) wet film thickness.
5. Repeat this process until the recommended film thickness is achieved.

- Please see the film thickness guide overleaf for information on the required thickness of product needed at various operating temperatures.

Film thickness guide

Operating temperature	100-150°C	150-200°C	200-250°C
Dry film thickness	4mm	5mm	6mm

Coverage Rates

4ltrs (1.1 US gallon) of fully mixed product will give the following coverage rates –

4m² at 1mm	43ft² at 40mil
2m² at 2mm	21.5ft² at 80mil

Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.

Cure Times

At 20°C (68°F) the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

20˚C	65% Humidity	2mm wet film thickness	1hour
30˚C	85% Humidity	2mm wet film thickness	30mins
Maximum overcoating time			Indefinite
Chemical resistance			3 days

Pack Sizes

This product is available in the following pack sizes –
4ltrs (1.1 US Gallons)

Colour

Single component – Grey

Over-coating times

Minimum - the material can be over-coated as soon as it is touch dry, approximately 4 hours at 20°C (68°F) 65% humidity.
Maximum – Indefinite

Storage Life

1 years if unopened and store in normal dry conditions (15-30°C/ 60-86F°)

Other Technical Documents

Safety Data Sheets	-	single component
Product Specification Sheet	-	Technical Performance Information

Health and Safety

Please ensure good practice is observed at all times. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material ensure you have read the fully detailed Safety Data Sheet.

Legal Notice: