

APPLICATION GUIDE



ROKOAT TechShield Thermal Reduction

Overview

Professional use only.

ROKOAT TechShield Thermal Reduction coating is a high performance, ambient curable and/or oven cured product. It is designed for simple application and high performance use.

ROKOAT reserves the right to remove all warranties and guarantees on this product if not applied according to this guide.

Safety Notes

Use in well ventilated areas. Use vapour filters on a mask.

Protective gloves and safety glasses must be worn at all times.

Health, safety and environmental information are provided for this product in the Materials Safety Data Sheet (MSDS). This gives details of potential hazards, precautions and First Aid measures, together with environmental effects and disposal of used products.

Application Methods

Brush / Roller

Spray

Micro-Fibre

Sponge

Surface Preparation

Extreme importance.

Surface cleanliness is critical, completely free from oils and other contaminants. Metals and/or alloy compounds should be blasted with a profile of 120 grit aluminium oxide, garnet or equivalent substance.

Glass or natural sand blasting is NOT recommended as it will leave silicone traces reducing the adhesion capacity of the coating.

Product Preparation

ROKOAT TechShield Thermal Reduction coating is a two-part mix product. TechShield & ROKOAT Catalyst # 12345.

Note: Allow 2-3 hours mix preparation time before application.

Mix XX parts TechShield Thermal Reduction with XX parts ROKOAT Catalyst # 12345.

When mixing the two components, a chemical reaction (foaming) will be seen, this is normal and will continue for several hours as the product is stirred.

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Attention: While this reaction is occurring DO NOT put the product into a sealed container. There is a risk of a pressurized explosion.

Mix the components¹ in an oversized vessel to allowing for some expansion.

Leave a loose lid to cover the product, to protect from dirt or other contaminants.

Stir mixed product occasionally over several hours, until the reaction and foaming is of a gentle consistency. At this stage the product is ready to be sprayed.

Attention: Do not store unused product in a tightly sealed container. Store unused product in a vented container that allows for pressure release.

Application Methodology

Apply a maximum 12.5 – 25 microns dry film thickness.

When spraying, use a fine spray tip of 0.08 or similar. Finer liquid mist provides a better final product flow out and will control the product's thickness.

Note: More is not better. Over building thickness will reduce the products ability to maintain adhesion and will cause flaking during the expansion and contraction of during thermal cycles.

Spray TechShield Thermal Reduction coating evenly onto the surface and allow to air dry. Surface will become tack free in approximately 15 minutes at ambient room temperatures.

Curing & Secondary Coatings

Ambient curing (and for the coating to reach full property potential) will take approximately 5 days. Slightly less in warmer conditions.

Alternative cure procedure: Once the coated surface is touch dry, the coated part may be placed into a convection style oven (free flowing air type), and cured at 177°C for approximately 30 minutes. At this time the coating will have reached it full property potential.

Once cool, the part is ready for service. Caution should be used in handling the finished part to avoid damage to the coated surface.

Note: If a re-coat is required do to damage on the coating surface, it will be necessary to use ROKOAT TechShield Bonding Primer, (refer to the Bonding Primer application guide).

Without this product the re-coat WILL NOT bond to the original coat of TechShield Thermal Reduction.

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Properties

Colour	
Viscosity	
Percent of Solids	60%
Odour (liquid)	
Odour (cured)	
V.O.C.	
RoHS	
Coefficient of Friction	
Thermal Stability (cured)	
Conical Bond	
Pencil Hardness	
Cross cut adhesion	
Specific Gravity	
Average applied film thickness (Dry)	
Average applied film thickness (Wet)	
Estimated Coverage Rate (Dry)	
Transfer to surrounding material	
Dry (Tack to touch)	
Semi-cured (time-ambient)	
Full Cure Time (ambient)	
Cleaning	Acetone, Toluene, Xylene or MEK

ASTM Test Battery

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