

TECHNICAL DATA

Korotherm® Thermal Protective Coating

Description

Korotherm® coating is a thermal barrier coating designed to shield substrates from high temperatures and fire environments. Korotherm® is a two component urethane, low density coating with excellent chemical resistance. This coating is designed to withstand years of severe operational environments commonly experienced with aircraft. Korotherm® coating has been successfully used on engine compartments of aircraft, rocket launch pads and on propane fuel tanks.

Korotherm® coating can be either sprayed applied or troweled over a primer coat in multiple coats to obtain the required film thickness. For further details on the application parameters of this coating, your local PPG Aerospace Application Support Center.

Korotherm® coating is qualified to the following specifications:

- 5PTMMG01A
- MMS-455
- MS-445

Korotherm® coating is compatible with the following DeSoto® primer:

- 519X303 High temperature primer

Application Properties (Typical)

Application temperature	65°F - 95°F (18.3°C to 35°C)
Application humidity	40% - 85%
Mix ratio	
By volume	
Base (821X404)	4 parts
Activator (910X407)	1 part
By weight	
Base (821X404)	100 parts
Activator (910X407)	25.83 parts
Viscosity,	
Initial mix, @ 5 rpm Spindle D	120 to 250 poise
Application life (pot life)	10 to 20 min.
VOC, EPA method 24	76 grams/liter
Dry film density	
0.0065 lbs/ft ² @ 1.0 mil dry film	
(32 g/m ² @ 25 microns dry film)	
Theoretical coverage	
1400 ft ² /gal @ 1.0 mil dry film	
(34.9 m ² /l @ 25 microns dry film)	

Recommended dry film thickness
50 to 135 mils (1.3 to 3.4 mm)

Drying times @ 75°F (23.9°C)

Set to touch	33 to 50 min.
Tack free time	60 to 80 min.
Dry hard	90 to 120 min.
Time between coats	20 min. to 24 hrs.
Full cure	7 days

Color Whitish gray

Spray equipment: Plural component spray equipment with a mixing chamber with a Hydra-Mastic airless spray gun.

Shelf life: 6 months @ 40°F (4.4°C) from date of manufacture

Performance Properties (Typical)

Service temperature	-65°F to 2,000°F - (-54°C to 1,093°C)	Conforms
Impact resistance		150 in-lbs (173 cm-kg)
Fluid resistance		
Mil-H-5606 hydraulic fluid	7 days @ 75°F (23.9°C)	Conforms
Mil-L-7808 jet engine oil	7 days @ 75°F (23.9°C)	Conforms
Mil-L-23699 synthetic lubricating oil	7 days @ 75°F (23.9°C)	Conforms
Mil-H-83282 fire resistant hydraulic oil	7 days @ 75°F (23.9°C)	Conforms
Humidity resistance	500 hrs. in humidity cabinet	Conforms
Corrosion		
Salt spray	Passes 500 hours	Conforms
Temperature of intumescence		500°F (261°C)
Specific heat (cal/g/°C)		.36 @ 24°C .22 @ 575°C
Fire resistance:	Backside temperature of coated aluminum panel remains below 550°F (288°C) above ambient for 15 minutes. When a 130 mils (3,250 microns) of coating is exposed to a 2,000°F (1,093°C) flame from a Fisher burner.	

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Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Life

Inspect the condition of the container to ensure compliance to FED-STD-141, Method 3011.1. The material should be stored at 40°F (4.4°C) to ensure shelf life.

Clean Up

Use Desoclean® 110 cleaner for cleaning equipment and surrounding areas. Clean up should be done promptly to avoid cured coating remaining in or on equipment.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at:

www.bergdahl.com

For sales and ordering information call

775-323-7542

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