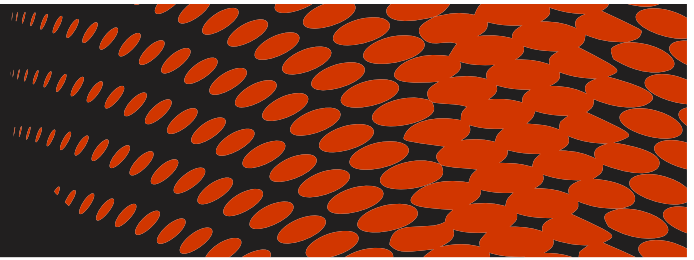


AS3201

Thermal Barrier Coating



Product Description

AS3201 is a thermal barrier coating designed for aerospace applications that require exceptional durability under harsh conditions. The coating is fully inorganic and offers superior abrasion resistance, full resistance to solvents, and protects against corrosion. AS3201 does not erode (chalk) or ablate following scorch testing, salt spray, or other accelerated aging tests. In the wet state, the product provides a conformal coating onto large complex surfaces and can be used to coat polymers, metal, ceramics, glasses and composite materials. The coating can be cured at room temperature with the addition of a curative, or at higher temperatures without.

Product Benefits

- Temperature resistant to 1,200°C
- Will not erode or ablate with solvent rub.
- Smooth surface finish – not chalky
- Exceptional outgassing properties
- Consistent deposition onto complex surfaces with or without primer* using spray or roll deposition.
- Good adhesion to polymers, metals, ceramics, glasses, and composites.
- No ablation following scorch testing and salt spray.
- Resistant to acidic and alkaline solutions.
- Cures at room temperature in 24 hours or 20 minutes at 80°C.

*Depending on substrate

Typical Properties

Physical State	Liquid/Paste
Color	White
Viscosity (Brookfield/Spindle @10RPM)	1000 mPa*s
Density	1.0 g/mL
pH	1-3
Percent Solids	35%
Shelf Life	6 mo, Room Temp, Sealed

Typical Processing Parameters

Deposition	Spray/Dip/Roll
Cure Temperature	25 – 850 °C
Cure Time with curative	20 min @ 80 °C 24 hrs @ 25 °C
Cure Time without curative	20 min @ 200 °C
Pot Life	5 hrs @ 25 °C
Recommended Thinner/Diluent	IPA/NBA/DAA

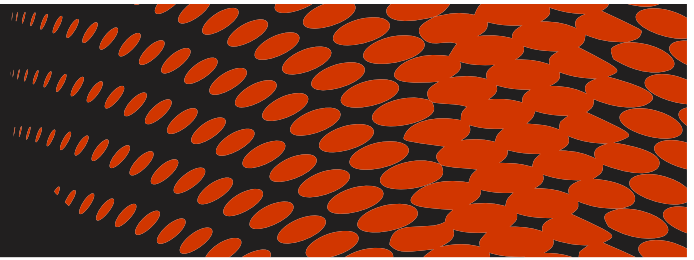
Typical Performance

Thermal Emittance	>0.89
Solar Absorbance	<0.30
Heat Resistance	1200°C
Pencil Hardness	6H
Outgassing	
E595	TML < 0.5%
	CVCM < 0.02%
E1559	80 K TML < 0.058%
	233 K VCM < 0.0015%
	263 K VCM < 0.0009%
	298 K VCM < 0.0001%
	298 K VCM < 0.0001%



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Caution

Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate SDS information.

Disclaimer

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