
Product Name: Thin Film High Heat Resistant Sacrificial Aluminium Coating

Product Number: IP9356-R1

Product Description: Sacrificial Aluminium Coating that is part of a range of corrosion resistant coatings designed for use in challenging environments such as aero engine, power generation and marine situations.

Spray applied IP9356 is used, on turbine blades, rotors, shafts and landing gear to protect components from salt laden atmospheres, high temperature oxidation, chemicals and abrasives.

The coating provides corrosion and oxidation protection to iron, steel, heat treated stainless steel alloys, titanium and other metallic substrates at temperature of up to 700°C. IP9356-R1 can also be super or vibro polished (RPS 619) to enhance flow of air in aircraft engines where smooth surfaces are essential to enhance energy efficiency (See also Ipseal IP9184 and Smoothseal IP9444). IP9356-R1, when vibro polished achieves a R_a surface finish of ≤ 12 micro inches.

Approvals/Specifications:

- MSRR 9356
- OMat 7/167A
- Alternative to Sermetal 709, 762 and 962
- ITP: SMM-919

Performance:

Salt Spray corrosion resistance - ASTM.B117 - Minimum 1000 hours at 40-50 micron film thickness. Externally tested to achieve >3000 hours ASTM B117 exposure.

Surface Conductivity - positive over complete film.

540 – 560°C cure – Electrically conductive post cure.

350°C cure – Electrically conductive post burnish process.

Adhesion - 1mm Cross hatch. BS EN ISO 2409, class 0

Dry Heat - 1000 Hours at 600°C (1100°F)

Cyclic salt water fog/heat at 450°C (840°F) - 240 Hours (480 Hours with Ipseal)

Cyclic salt water fog/heat humidity/heat at 450°C (840°F) - 240 Hours (480 Hours with Ipseal)

Operating Temperature: -40°C (-40°F) to 700°C (1290°F)

Components:

Single Pack Product. May be thinned for application using demineralised / deionised water

Application:

Surface Preparation:

Ensure that surfaces are totally clean and dirt free

Pre-Treatment: Typically de-grease then grit blast with 120/220 aluminium oxide. Surfaces must be dust free prior to coating.

Paint Preparation:

De-ionised Water; up to 5% by volume as required

Application Method:

Spray Conventional or HVLP. Fluid tip sizes between 0.8 and 1.6mm dependent upon component size and geometry. Gravity, syphon or pressure feed equipment may be used.

Drying Curing:

540°C (2 hours) – 560°C (1 hour) (1000 – 1040°F) - dull matt grey - surface finish approximately 70 micro inches.

350°C (1 hour) (660°F) – dull matt grey finish, non-conductive - bead peened - shiny bright conductive aluminium similar to metal. Surface finish approximately 70 micro inches.

Refer to process sheet IPAS666 for complete Ipcote range application instructions.

Technical Properties:

Supply Viscosity:

ISO3 @ 23 +/- 2°C – 30 +/- 5 seconds as supplied

Standard dry film thickness:

0.01-0.03mm per coat
Recommended. May be Applied down to 0.005-0.01mm

Technical Data Sheet



	May be applied down to 0.005-0.01mm
Flash Point:	N/A – Aqueous product
VOC Content:	N/A
Colour:	Grey/Green solution. Dull Grey after baking.
Pack Size:	1 and 5 litre
Density:	1.6 ± 0.02kg/l
Gloss:	N/A
Thinner:	Demineralised/Deionised Water
Solvent/Clean Up:	Water
Catalyst:	N/A
Theoretical Coverage:	7.9 – 10 m ² per litre

Storage:

Highly flammable liquid: store and use in accordance with the flammable liquid regulations

Shelf Life: 12 months temperate; 6 months tropical

Before use, refer to Product Safety Data Sheet

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Safety Data Sheets:

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