

# Technical Data Sheet



IP1041

Edition February 2025 Revision 1

## Product Name

IPLA Diffusion Coating

## Product Description

Ipal IP1041 diffused aluminide coating is designed as a protective coating for gas turbine hot section parts at temperatures up to 1000°C. Ipal 1041 is used for sulphidation protection in

industrial and marine gas turbines. Often used on nickel-based turbine alloy materials the coating imparts a high temperature oxidation resistant aluminide coating for turbine components in all areas of industrial and aero gas turbine use.



IPAL IP1041

## REACH Status

This coating contains Chromium Trioxide: CAS No: 1333-82-0. This is classified as a SVHC, and under annex XIV

## UK and EU Authorisation – October 2024

### October 2024 – UPDATE - UK

AFA032-01 – Chrome Conversion coating use Aerospace (DOW19)	<b>UKREACH/24/15/4</b>
AFA033-01- Formulation of mixtures	<b>UKREACH/24/16/1</b>
AFA037-01 – Slurry Coatings Aerospace use	<b>UKREACH/2024/18/1</b>
AFA045-01 – Formulation – Industrial	<b>UKREACH/24/22/0</b>
AFA045-02 – Industrial gas turbine use	<b>UKREACH24/22/1</b>

### October 2024 – UPDATE – EU

AFA344 – Slurry Coating	<b>REACH/24/68/3</b>
AFA337-02 – Chrome Conversion Coating Aerospace use	<b>REACH/24/61/1</b>

### Extension Dates from October 2024:

UK – 05/09/2036 (12 Years)

EU – 7 YEARS (Dates to be Confirmed – Still ongoing)

EU – DOW 19 a 12 year extension

## Approvals and Specifications

MSRR1041 (RPS603)

Omat 7/129A

Safran Helicopter Engines CCT\_00618

REACH Authorisation when ratified by EU Parliament perhaps Qtr. 3 2020 will be 0032 – 4 & 5

Siemens 552213

## Performance Properties

Exceeds 140 hours testing at 900oC (1600oF) cyclic burner rig testing with a 2 parts per million dosing of salt.

## Components

Single Pack Product. May be thinned for application using demineralised / de-ionised water

## Application

Refer to IPAS for full detailed instructions.

## Liquid Technical Properties\*\*

Supply Viscosity	ISO 2431, Cup Number 4, 23-27 seconds
Flash Point	N/A – Aqueous Product
Density	1.6 g/ml
VOC Content	0
Colour	Grey
Gloss	Matt
Thinner	De-ionized water
Solvent/Clean Up	De-ionized Water
Theoretical Coverage	8.4 m <sup>2</sup> per litre at 50 micron
Pack Size	1 Litre Containers
Pot Life	Single Pack product

\*\* - The values referenced are obtained from Batch testing using controlled Quality techniques.

## Storage

Water based corrosive and environmentally hazardous material.  
Ensure product is stored in a warm, dry environment with a minimum temperature above 5°C (40°F). Do not allow to freeze.  
Ensure storage complies with local environmental controls.  
**Shelf Life\*\*\*:** 12 months temperate; 6 months tropical

### **Before use, refer to Product Safety Data Sheet**

\*\*\* - Indestructible Paint decline any responsibility deriving from improper storage of Product and its Catalyst.

## Contact

For Safety Data Sheets or other Information please contact our sales Department:

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