

Product Name

Chromate Touch Up Solution

Product Description

Brush on touch up solution for chromating magnesium alloy parts, where dismantling and re-chromating of the article is too costly, or impractical. Used for repair of small areas of damage to chromate protection of magnesium components.

DOW 19, also known as chromic acid, is a treatment that is used on magnesium parts that need spot touch-up to repair minor damage. It can also be used as a temporary coating to prevent corrosion between production processes. This coating is extremely thin and offers no corrosion resistance. DOW 19 also contains hexavalent chromium (aka: Cr6+), which is known to be a very toxic chemical. This coating is applied at room temperature by either immersion in a tank or by brushing the solution onto the base magnesium. Because DOW 19 is allowed to react with the base magnesium for 1-3 minutes, the magnesium will turn into dark brown colour.

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)	UKREACH/24/15/4
AFA033-01- Formulation of mixtures	UKREACH/24/16/1
AFA037-01 – Slurry Coatings Aerospace use	UKREACH/2024/18/1
AFA045-01 – Formulation – Industrial	UKREACH/24/22/0
AFA045-02 – Industrial gas turbine use	UKREACH24/22/1

October 2024 – UPDATE – EU

AFA344 – Slurry Coating	REACH/24/68/3
AFA337-02 – Chrome Conversion Coating Aerospace use (Dow19)	REACH/24/61/1

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

Nato Stock No NSN 8030 992887553
SAE AMS-M-3171 type VI
Mil-M-3171C-Type vi.
Rolls Royce Product No. 111874
Covered in RPS 22 (Pages 14 & 15)
OMAT 1/275A
EADS Astrium MPS 0241
Airbus Helicopter; MTC 20-04-04-408

Performance Properties

This conversion coating provides performance similar to the original surface treatment

Components

Single Pack Product.

Application

Refer to IPAS if applicable for full detailed instructions.

Surface Preparation	Ensure that surfaces are totally clean and dirt free. Surfaces must be dust free prior to coating.
Paint Preparation	Ready for Use
Mixing Ratio	Single Pack Product
Application Method	Use in accordance with relevant process specification or overhaul process. Alternatively apply by swab or brush. Apply continuously until a brassy coloured film is produced. Water-wash when the desired colour is observed. The resulting appearance should be of a light-dark brown colour. The article(s) may then be primed and finished.
Drying and Curing	Following application and water washing to remove any residual material dry to remove moisture before further coating. The applied treatment may be oven dried at up to 80°C to aid drying before further processing of the treated surface.

Technical Data Sheet



DOW19

Edition February 2025 Revision 1

Liquid Technical Properties**

Supply Viscosity	N/a – Water Viscosity
Flash Point	N/A – Aqueous Product
Density	1.01 g/ml
VOC Content	0 g/litre
Colour	Grey Green solution, Matt Grey after baking
Thinner	N/A
Solvent/Clean Up	De-ionized Water
Theoretical Coverage	Application Specific
Pack Size	500ml Container
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

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