



# Rustilo™ DW 180 HF

Dewatering corrosion preventive

### Description

Castrol Rustilo<sup>™</sup> DW 180 HF (previously called SafeCoat<sup>™</sup> DW 18 VC) is a high quality corrosion preventive with dewatering properties, specifically formulated based on a low volatile solvent in order to comply with the today's VOC-legislation.

The solvent, after evaporation, leaves a thin oily to greasy protective film.

### Application

Rustilo DW 180 HF rapidly removes water from components subsequent to electroplating processes, after machining using soluble cutting fluids, or parts that have been washed or mass vibratory finished. The thin residual film provides effective short to medium term protection against corrosion during intermediate storage

or transportation of parts and components.

Although Rustilo DW 180 HF can be applied by brushing or spraying, its dewatering action is most effective if the articles to be protected can be immersed in a dip tank.

### **Advantages**

- Good operator acceptance as based on a low odour de-aromatised solvent.
- VOC Solvent Directive (1999/13/EC): Solvent is not classified as a volatile organic compound (VOC) at 20 °C.
- Heavy metals free, (example Barium) which may help you to fulfil aspects of legislative requirements and waste treatment requirements that specify that these chemicals are excluded.
- Contains a corrosion inhibitor package suitable for moderate conditions which provides reliable protection of components.
- Very good water displacing and penetrating properties which avoids water entrapment and corrosion under film.
- Good stability against acidic and alkaline contaminations which enables a long bath-lifetime to help reduce operational cost.
- Suppresses fingerprints to protect handled parts from fingerprint corrosion.
- If required protective films of Rustilo DW 180 HF can be removed by using a petroleum solvent or alkaline process cleaner, all available from Castrol.

## **Typical Characteristics**

Description	Test Method	Unit	Value
Appearance	Visual	-	Clear, brown liquid
Density @ 15°C	ASTM D1298	-	0.82
Viscosity @ 40°C	ASTM D446 / ISO 3105	mm²/s	3.1
Flash Point, PM	ASTM D93 / ISO 2719	°C	> 90
Film Type	Visual	-	oily-greasy
Total Film Forming Content	Calculated	%	12
Film Thickness	In-house	μm	0.5
Corrosion Protection	(*) Indoor Storage	month	9 - 12
	(**) Outdoor Storage	month	1 - 3

Subject to usual manufacturing tolerances.

### **User Advice**

The high flash point solvents of the Low VOC Solvent based range have been chosen to support compliance with the EC Solvent Directive (1999/13/EC).

Please note, that their low volatility has an influence on the film forming speed and extends the drying time compared to conventional non-VOC compliant products. Further, due to the higher viscosity and density of the base fluids, the dewatering properties might be slightly decreased.

### **Additional Information**

The claims on film thickness and consumption are average values. These are valid for smooth surfaces with good drain-off characteristics and simple geometries without holes or recesses.

Average drying time is the time until the majority of the solvent is evaporated at ambient temperature and a relative humidity of 60 - 70%. The full corrosion protection will be provided when the solvent is completely evaporated.

(\*) "Indoor storage" describes the storage of ferrous components in closed store-rooms having a relative humidity of 60%. Increased protection times could be achieved by treating finished surfaces or storing the parts in a sealed pack.

(\*\*) "Outdoor storage" describes open storage, which assumes primary protection from the elements by tarpaulin or other form of cover.

#### Storage

To avoid product deterioration always keep the container/drum tightly sealed. Store the product in a cool, dry place away from direct sunlight. Prevent exposure to frost and avoid water ingress. For optimum product stability, it is preferable to store the product indoors between  $5^{\circ}$ C and  $45^{\circ}$ C /  $41^{\circ}$ F and  $113^{\circ}$ F.

Product must be used in a liquid form. Influence of temperature may cause some cloudiness, which is reversible and does not have an impact on product quality or corrosion protection performance in most instances.

For more details, please refer the product safety data sheet.

This product was previously called SafeCoat DW 18 VC. The name was changed in 2015.

Rustilo<sup>™</sup> DW 180 HF 11 Feb 2015 Castrol, the Castrol logo and related marks are trademarks of Castrol Limited, used under licence.

This data sheet and the information it contains is believed to be accurate as of the date of printing. However, no warranty or representation, express or implied, is made as to its accuracy or completeness. Data provided is based on standard tests under laboratory conditions and is given as a guide only. Users are advised to ensure that they refer to the latest version of this data sheet. It is the responsibility of the user to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations. Material Safety Data Sheets are available for all our products and should be consulted for appropriate information regarding storage, safe handling, and disposal of the product. No responsibility is taken by either BP plc or its subsidiaries for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from hazards inherent in the nature of the material. All products, services and information supplied are provided under our standard conditions of sale. You should consult our local representative if you require any further information.

Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

www.castrol.com/industrial