

## Rustilo Aqua 498

High performance aqueous corrosion preventive

### Description

Rustilo Aqua™ 498 is an innovative, high performance, environmentally responsible water-based corrosion preventive formulated on mineral oil and a selected blend of corrosion inhibitors.

After evaporation of the water phase Rustilo Aqua 498 deposits a highly efficient oily-greasy film, which is usually just provided by solvent-based products.

### Application

Rustilo Aqua 498 can be used to protect a wide range of ferrous parts, but is particularly effective on tubings, bar material and other components with uniform geometry where corrosion protection and drying time will be optimised.

Rustilo Aqua 498 is ideal for protection of these parts and components prior to long-term storage or with appropriate packing also for overseas shipment.

### Conditions of Use

Concentration: 100%, as supplied ("Ready-to-Use")

Temperature: 20 - 30 °C

### Advantages

- Reliable corrosion protection on ferrous metals
- Excellent wetting characteristics ensure the creation of an even protective coating
- Good film retention reduces dripping off losses and thus increases process reliability
- Environmentally responsible water-based formulation provides a safer working environment:
  - Solvent-free formulation; complies with EC Solvent Directive (1999/13/EC)
  - Eliminates fire hazard, hence possibly provides potential for reduction of insurance premiums
  - Formulated without Barium additives
  - Mild odour
- Multi-metal compatibility
- Short drying time - minimum impact on process/production times
- If required protective films of Rustilo Aqua 498 can be removed by using an alkaline process cleaner, also available from Castrol

## Typical Characteristics

Description	Test Method	Unit	Value
Appearance	Visual	-	beige, hazy fluid
Density @ 15 °C	ASTM D1298 / ISO 3675	g/ml	0.97
Kinematic Viscosity @ 20 °C	ASTM D445 / ISO 3104	mm <sup>2</sup> /s	20 - 50
Total Film Forming Content	In-house	%	36
Film Thickness	In-house	µm	16
pH (concentrate)	ASTM E 70	-	9.1
Corrosion Protection	(*) Indoor Storage	Month	12 - 36
	(**) Outdoor Storage	Month	6 - 18

Subject to usual manufacturing tolerances.

## Concentration Control

Concentration of the film forming content of Rustilo Aqua 498 is determined by the non-volatile residues (total solids) method.

## User Advice

### Application:

Rustilo Aqua 498 is mainly designed for use in dip application. It is beneficial to keep the bath in constant circulation, i.e. by a circulation pump, stirrer or continuous component throughput.

Before treatment with Rustilo Aqua 498 the parts surface should be free of contaminations, such as oils, greases and particles to ensure its best performance.

### Maintenance:

It is recommended to check concentration, pH and bath level regularly.

Once the product is introduced into a holding tank pending application, it is advised to keep this tank covered to reduce evaporation losses, minimise skin formation on the bath surface and limit deposits onto the application equipment.

In order to minimise the risk of any stability or corrosion issues caused by increasing levels of water hardness and corrosive inorganic salts (i.e. chloride) it is recommended to top-up evaporation losses by deionised water.

### Drying:

A very important aspect of water-based corrosion preventives is the drying time once the product has been applied onto the components.

It must be allowed to dry (min 60 minutes) prior to packaging of treated components in order to ensure maximum corrosion protection. Making use of supportive drying equipment, i.e. hot air blower, could further reduce drying time.

## Additional Information

The claim on film thickness is an average value. This is valid for smooth surfaces with good drain-off characteristics and simple geometries without holes or recesses.

(\*) "Indoor storage" describes the storage of ferrous components in closed store-rooms having a relative humidity of 60%. Increased protection times could be achieved when treating finished surfaces or store 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°C and 45 °C / 41°F and 113°F.

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

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