

Castrol Aquasafe 21

Soluble corrosion preventive oil

Description

Castrol Aquasafe™ 21 is a medium viscosity mineral oil, containing film forming additives and coupling agents, supplied as a concentrate for dilution with water prior to use.

Application

Aquasafe 21 is an interoperational medium term corrosion preventive which is used as an emulsion. It leaves an ultra thin, oily film on ferrous components after the evaporation of the water phase. It is particularly recommended for the protection against corrosion of metal components after other aqueous treatments.

Aquasafe 21 used to be applied by immersion, preferably at 50 – 60 °C. Alternatively low pressure spray, hot or cold, could be used.

Advantages

- Solvent-free, complies with EC Solvent Directive (1999/13/EC).
- Free from heavy metals, such as Barium.
- Stable emulsion up to 80 °C.
- Usage even after applications where increased contamination could be expected, e.g. subsequent to heat treatment or electroplating processes.
- Very good stability against inorganic salts.
- Excellent wetting properties.

Typical Characteristics

	Unit	Test Method	Value
Appearance	-	Visual	Brown fluid
Relative Density @ 15 °C	kg/m ³	DIN 51 757	950
Flash Point	°C	ISO 2592	> 150
Viscosity @ 40 °C	mm ² /s	DIN 51 562	70
Film Type	-	-	Ultra-thin, oily
pH (10% emulsion)	-	-	9.2
Corrosion Protection (20% emulsion)	Month	Indoor storage	8 - 12
	Month	Outdoor storage	Not recommended

User Advice

- Make up an emulsion by adding the Aquasafe 21 to water (preferably at 30 - 35 °C).
- Typical concentration used to be 10 – 20%.
- Being a semi-stable emulsion it is beneficial to keep the bath in constant circulation, i.e. by a circulation pump, stirrer or continuous component throughput.
- Check concentration, pH and bath level regularly, especially if used hot.
- The protective film must be completely dried before packaging.
- 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.

Additional Information

- "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.
- Influence of temperature may cause some cloudiness, which is reversible and doesn't have an impact on product quality.
- If required protective films of Aquasafe 21 can easily be removed by using a petroleum solvent or alkaline process cleaner, all available from Castrol.

Storage

To avoid product deterioration, keep the container/drum tightly sealed always. Prevent any frost and water ingress.

Store it in a cool and dry place away from direct sunlight. It is preferable to store the product indoors always.

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

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