



RUST VETO[®] 4221

RUST VETO[®] 4221 is a water emulsifiable rust preventive. The product is readily emulsifiable in either hard or soft water. No special mixing procedures are required. An emulsion of RUST VETO[®] 4221 will deposit a thin, protective film on treated surfaces. The thin film will typically provide corrosion protection, on plain carbon or low alloy steel, for six months indoors. Film removal is accomplished with hot water and detergent.

APPLICATIONS

RUST VETO[®] 4221, emulsified in water, provides excellent in-plant rust protection. In-process inventory can be protected for up to six months, even in the most humid plant conditions. Flammable solvent-type rust preventives and their hazards are eliminated when emulsified RUST VETO[®] 4221 is used. Parts can be dipped into an emulsion of RUST VETO[®] 4221 or, because of the product's low foaming tendency, parts can be successfully treated in the final stage of power spray washers. As a final preservative of blackened phosphated parts, RUST VETO[®] 4221 has received wide acceptance. The thin film deposited by RUST VETO[®] 4221 results in finished parts without an "oily" feel. For most dipping applications, a dilution of 9 parts of water to 1 part of RUST VETO[®] 4221 is recommended. For power spray washer application, the maximum concentration should be 1 part to 20 parts water.

TYPICAL PHYSICAL PROPERTIES

Appearance, Neat	Clear, amber oil
Density	0.91
Viscosity @ 40 °C, cSt	32
Flash Point, °C, COC	100°C
Humidity Protection, 1010 Steel treated with a 10% Emulsion	14 days minimum
Salt Spray (5%) Protection, 1010 Steel treated with a 10% Emulsion	4-6 hours minimum

CONCENTRATION DETERMINATION (RUST VETO[®] 4221 Emulsions)

APPARATUS AND REAGENTS

- 100 ml graduated cylinder
- Medicine dropper
- Methanol
- Hydrochloric acid (conc) - * Handle with care

Fluid Partnerships Making a World of Difference

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PROCEDURE

1. Pour 50 ml of RUST VETO[®] 4221 emulsion in the graduated cylinder.
2. Add 46 ml of methanol, then carefully shake to mix the two liquids.
3. Add 4 ml of concentrated hydrochloric acid*. Mix carefully and let the mixture stand until the oil splits on top.
4. Calculate the percent RUST VETO[®] 4221.
 $\% \text{ RUST VETO}^{\circledR} 4221 = \text{ml of oil layer} \times 2$

INSTRUCTIONS FOR USE

RUST VETO[®] 4221 mixes easily with water. Upon addition of the required amount of RUST VETO[®] 4221 to the water, a minimum of mixing is required to form a white emulsion. If an emulsion of RUST VETO[®] 4221 is left standing still for several days, a layer of oil and/or cream form on the surface. Any separated oil is easily mixed back into the emulsion. Emulsions of RUST VETO[®] 4221 remain stable when hot; to a maximum temperature of 80^oC.

SHIPPING INFORMATION

RUST VETO[®] 4221 available in 205 litre drums.

SHIPPING CLASSIFICATION

Petroleum Oil - NOS.

SHELF LIFE

One (1) year

WARRANTY

The information given here is considered to be correct and is offered for your consideration, investigation and verification. No warranties are expressed or implied, since the use of our products is beyond our control. Statements concerning the use of Houghton products are not to be construed as recommending the infringement of any patent.