FORCEFIELD - Rust Inhibitor

Description

FORCEFIELD - Rust Inhibitor is a concentrated non-nitrite liquid cleaner/rust inhibitor designed for use on ferrous and non-ferrous metals in fabrication and heat treatment operations.

User Benefits

- Provides indoor rust inhibition for up to 10 weeks dependant on storage environment.
- No nitrites.
- Does not contain hazardous alkalis.
- Does not contain silicates thus avoiding deposits which can interfere with subsequent operations.
- Non emulsifying - oil can be skimmed from surface - thus extending tank life.
- Low foaming; can be used in high pressure spray units.

Physical and Chemical Characteristics

Form	:	Liquid
Colour	:	Clear Brown
Odour	:	Mild amine
Specific Gravity	:	1.03
Flash Point	:	None
pH Concentrate	:	10.9
pH in use	:	9.5-10.5

Areas of Application

FORCEFIELD - Rust Inhibitor can be used in single or multi stage spray washers as well as vibratory and ultrasonic units for cleaning and rust protection.

FORCEFIELD - Rust Inhibitor is suited for application prior to heat treatment as the absence of silicates and hydroxides produce no adverse effect when the film is exposed to high temperatures.

After heat treatment of parts **FORCEFIELD - Rust Inhibitor** can be used for removal of quenching oils and also provides subsequent rust inhibition thereby producing effective results in both operations.

Operating Details

As a Cleaner/Rust Inhibitor:

Concentration	:	3 - 7% v/v
Temperature	:	Ambient to 70°C
Time	:	0.5 - 3 minutes

As a Rust Inhibitor:

Concentration	:	2- 5% v/v
Temperature	:	Ambient
Time	:	15 - 30 seconds

An air blow off should follow both applications.

Note: Do not rinse **FORCEFIELD - Rust Inhibitor** film from surface.

Solutions of **FORCEFIELD - Rust Inhibitor** will cause corrosion to copper parts after long-term contact. If copper components are present in equipment containing **FORCEFIELD - Rust Inhibitor** solutions, contact Hotwash Australia.

Test Procedure

- Take a 10 ml bath sample
- Add 3-6 drops of mixed BCG/MR indicator
- Titrate with 0.1N acid until colour changes from green to red.
- Determine the concentration as follows:

mls of acid x 0.35 = % v/v Concentration

For maximum corrosion protection and resistance to bacterial and fungal growth, the solution pH should be a minimum of 9.5. Increase pH when required by adding **FORCEFIELD - Rust Inhibitor**. If the apparent bath concentration rises excessively (to the point where solution residues become a problem due to solution contamination) then the bath should be partly dumped to reduce contamination.

Safety Precautions

Avoid contact with skin and eyes.
Wear splash proof safety glasses and rubber gloves.

Construction Materials

Tanks, pumps and pipes used for **FORCEFIELD - Rust Inhibitor** solutions may be made from mild steel, stainless steel, PVC or polypropylene. Do not use copper.

First Aid

If poisoning occurs, contact a doctor or Poisons Information Centre.

If swallowed, do NOT induce vomiting. Give a glass of water.

If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

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