

**PRETREATMENT TECHNICAL DATA SHEET****A NON-NITRITE RUST INHIBITOR****PRODUCT DESCRIPTION**

RUSTAREST 1073 is a clear light yellow aqueous solution of non-nitrite rust inhibitors. Depending upon storage conditions, it provides up to several weeks of indoor rust protection and, normally, does not need to be removed prior to assembly of the protected parts.

TECHNICAL PROPERTIES

Composition:	Liquid
Appearance:	Clear to Light Yellow
Recommended Concentrations:	1-3% by volume
Recommended Temperatures:	Ambient to 160 ⁰ F

PRODUCT ADVANTAGES

- Excellent short-term indoor rust protection
- Easily dispensed automatically or manually
- No nitrites
- Non-caustic
- Dry film-no oily residue
- Low use cost

RUSTAREST 1073

PRETREATMENT TECHNICAL DATA SHEET

USE & CONTROL INSTRUCTIONS:

Operating Properties (Typical):

SPRAY WASHERS AND IMMERSION TANKS:

RUSTAREST 1073 is normally used at 1 to 3 % with water in the final rinse tank. Heating this solution up to 160°F will aid in drying parts. Always allow the parts to cool and dry before packing and/or storing.

TUMBLING BARRELS AND LABORATORY DEBURRING EQUIPMENT: **RUSTAREST 1073** can be added at 1 to 3 % to the regular DEBURRING and/or burnishing compounds to give temporary protection against rust. **RUSTAREST 1073** can also be used in the final rinse and rust preventive at the completion of the tumbling and DEBURRING operation. Parts treated as such should not be rinsed and should be allowed to dry before packaging.

WET BLAST EQUIPMENT: **RUSTAREST 1073** is an excellent anti-rust and dispersing agent for wet blast equipment. Use at 1-2% with water.

Specific process conditions may warrant operating the above parameters outside of the typical ranges. Please consult your PPG representative.

CLEANABILITY: The rust preventive film left on parts by **RUSTAREST 1073** can easily be removed by any alkaline cleaner.

RUST PROTECTION: **RUSTAREST 1073** will provide short-term indoor rust protection. The rust protection time will vary with the following factors:

1. Concentration used
2. Humidity in the storage area
3. Quality of the air and temperature in the storage area

Charging Instructions:

For each percent by volume needed to charge, add 10 gallons of **RUSTAREST 1073** per 1000 gallons of tank volume.

Analysis Procedure:

The **RUSTAREST 1073** bath is controlled by Total Alkalinity.

RUSTAREST 1073

PRETREATMENT TECHNICAL DATA SHEET

Equipment needed:

For ordering information, please refer to the Reagent Reference list available from your PPG representative.

- 25 ml. Autoburet or
- 50 ml. Digital Buret

- 25 ml. Volumetric Pipette
- Pipette Bulb
- 250 ml. Erlenmeyer Flask

Reagents needed:

- Bromophenol Blue indicator
- 0.1 Normal Sulfuric Acid

Procedure:

CAUTION: DO NOT PIPETTE BY MOUTH!

Total Alkalinity

1. Pipette a 25 ml. sample of the bath into a 250 ml. Erlenmeyer flask
2. Add 10 drops of Bromophenol Blue indicator and swirl to mix. The sample will turn blue.
3. Slowly add 0.1 Normal Sulfuric Acid through a burette while swirling the sample to mix.
4. The endpoint of the titration is reached when the sample turns to the first yellow color after green.
5. Each milliliter of 0.1 Normal Sulfuric Acid is recorded as one (1) point of Total Alkalinity

Calculation:

Total Alkalinity X 0.26 = % by volume **RUSTAREST 1073**

CONCENTRATION % BY VOLUME	TOTAL ALKALINITY
0.5	1.9
1.0	3.8
1.5	5.8
2.0	7.7
2.5	9.6
3.0	11.5

RUSTAREST 1073

PRETREATMENT TECHNICAL DATA SHEET

RUSTAREST 1073 Replenishment:

To raise the concentration 1.0% volume, add 10 gallons of **RUSTAREST 1073** per 1000 gallons of solution volume.

To raise the concentration by one point of Total Alkalinity, add 6.6 gallons of **RUSTAREST 1073** per 1000 gallons of tank volume.

Equipment:

The tank and equipment for the **RUSTAREST 1073** may be constructed of mild steel.

TECHNICAL DATA SHEET DISCLAIMER—INDUSTRIAL COATINGS:

* Statements and methods described herein are based upon the best information and practices known to PPG Industries, Inc. ("PPG"). Any statements or methods mentioned herein are general suggestions only and are not to be construed as representations or warranties as to safety, performance, or results. Since the suitability and performance of the product is highly dependent on the product user's processes, operations, and numerous other user-determined conditions, the user is solely responsible for, and assumes all responsibility, risk and liability arising from, the determination of whether the product is suitable for the user's purposes, including without limitation substrate, application process, pasteurization and/or processing, and end use. No testing, suggestions or data offered by PPG to the user shall relieve the user of this responsibility. PPG does not warrant freedom from patent infringement in the use of any formula or process set forth herein.

PPG PRETREATMENT 23000 ST. CLAIR AVE EUCLID OH 44117 216 486 5300 www.ppg.com
--