1. Product and Company Identification

Product Name: Rid O' Rust Formula 2000  
CAS #: Mixture  
Product use: Rust Stain Preventer  
Manufacturer: Pro Products LLC  
7201 Engle Road  
Fort Wayne, IN 46804-5875 US  
Phone 260-483-2519  
Emergency Phone: 1-800-424-9300 (CHEMTREC)

<table>
<thead>
<tr>
<th>LEGEND</th>
<th>HMIS/NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
</tr>
</tbody>
</table>

2. Hazards Identification

Emergency overview  
CAUTION  
EYE IRRITANT  
Corrosive to metals.

Potential short term health effects  
Routes of exposure: Eye, Skin contact, Inhalation, Ingestion.  
Eyes: Causes irritation.  
Skin: May cause irritation.  
Inhalation: May cause respiratory tract irritation.  
Ingestion: May cause stomach distress, nausea or vomiting.

Target organs: Eyes. Skin. Respiratory system.

Chronic effects: Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

Signs and symptoms: Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA Regulatory Status: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects: This product has not been tested.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>77-92-9</td>
<td>7 - 13</td>
</tr>
<tr>
<td>1-Hydroxyethylidene-1, 1-diphosphonic acid</td>
<td>2809-21-4</td>
<td>5 - 10</td>
</tr>
</tbody>
</table>

4. First Aid Measures

First aid procedures  
**Eye contact**: Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

**Skin contact**: Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Inhalation**: If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion**: Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
5. Fire Fighting Measures

Flammable properties
Not flammable by WHMIS/OSHA criteria.

Extinguishing media
Unsuitable extinguishing media: Not available

Protection of firefighters
Specific hazards arising from the chemical: Not available
Protective equipment for firefighters: Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products
May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus.

Explosion data
Sensitivity to mechanical impact: Not available
Sensitivity to static discharge: Not available

6. Accidental Release Measures

Personal precautions
Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Environmental precautions
Do not contaminate water.

Methods for containment
Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Use water spray to reduce vapors or divert vapor cloud drift.

Methods for cleaning up
Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling
Use good industrial hygiene practices in handling this material.

Storage
Keep out of the reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Hydroxyethylidene-1, 1-diphosphonic acid</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>Not established</td>
</tr>
<tr>
<td>Citric acid</td>
<td>ACGIH-TLV</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m3</td>
</tr>
<tr>
<td></td>
<td>OSHA-PEL</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m3</td>
</tr>
<tr>
<td>Engineering controls</td>
<td>Not normally required if good ventilation is maintained.</td>
</tr>
</tbody>
</table>
Personal protective equipment

Eye / face protection
Wear safety glasses with side shields.

Hand protection
Not normally required.

Skin and body protection
As required by employer code.

Respiratory protection
Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations
Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Color</td>
<td>Blue</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>&lt;1.0</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Pour point</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, lower, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limits in air, upper, % by volume</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.08</td>
</tr>
<tr>
<td>Octanol/water coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Percent volatile</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Reactivity
This product may react with strong alkalies.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
Do not mix with other chemicals.

Incompatible materials

Hazardous decomposition products
May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus.

11. Toxicological Information

Component analysis - LC50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Hydroxyethyldene-1, 1-diphosphonic acid</td>
<td>Not available</td>
</tr>
<tr>
<td>Citric acid</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Component analysis - Oral LD50

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Hydroxyethyldene-1, 1-diphosphonic acid</td>
<td>1800 mg/kg rat</td>
</tr>
<tr>
<td>Citric acid</td>
<td>5040 mg/kg mouse; 3000 mg/kg rat</td>
</tr>
</tbody>
</table>
Effects of acute exposure

Eye
Causes irritation.

Skin
May cause irritation.

Inhalation
May cause respiratory tract irritation.

Ingestion
May cause stomach distress, nausea or vomiting.

Sensitization
Non-hazardous by WHMIS/OSHA criteria.

Chronic effects
Non-hazardous by WHMIS/OSHA criteria.

Carcinogenicity
Not classified or listed by IARC, NTP, OSHA and ACGIH.

Mutagenicity
Non-hazardous by WHMIS/OSHA criteria.

Reproductive effects
Non-hazardous by WHMIS/OSHA criteria.

Teratogenicity
Non-hazardous by WHMIS/OSHA criteria.

Name of Toxicologically Synergistic Products
Not available

12. Ecological Information

Ecotoxicity
See below

Ecotoxicity - Freshwater Fish - Acute Toxicity Data
1-Hydroxyethylidene-1,1-diphosphonic acid 2809-21-4 96 Hr LC50 Lepomis macrochirus: 868 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 360 mg/L [static]
Citic acid 77-92-9 96 Hr LC50 Lepomis macrochirus: 1516 mg/L [static]

Ecotoxicity - Water Flea - Acute Toxicity Data
1-Hydroxyethylidene-1,1-diphosphonic acid 2809-21-4 48 Hr EC50 Daphnia magna: 527 mg/L
Citic acid 77-92-9 72 Hr EC50 Daphnia magna: 120 mg/L

Persistence / degradability
Not available

Bioaccumulation / accumulation
Not available

Mobility in environmental media
Not available

Environmental effects
Not available

Aquatic toxicity
Not available

Partition coefficient
Not available

Chemical fate information
Not available

Other adverse effects
Not available

13. Disposal Considerations

Disposal instructions
Review federal, state/provincial, and local government requirements prior to disposal.

Waste from residues / unused products
Not available

Contaminated packaging
Not available

14. Transport Information

U.S. Department of Transportation (DOT)

Basic shipping requirements:

Proper shipping name
Corrosive liquid, acidic, organic, n.o.s.
(1,2,3-PROPANETRICARBOXYLIC ACID, 2-HYDROXY-)

Hazard class
8

UN number
UN3265

Packing group
III

Additional information:

Special provisions
IB3, T7, TP1, TP28

Packaging exceptions
154

ERG number
153
Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(1,2,3-PROPANETRICARBOXYLIC ACID, 2-HYDROXY-)

Hazard class: 8
UN number: UN3265
Packing group: III
Additional information: 16

15. Regulatory Information

Canadian federal regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canada - WHMIS - Ingredient Disclosure List
Citric acid 77-92-9 1%

WHMIS status: Controlled
WHMIS classification: Class D - Division 2B, Class E - Corrosive Material
WHMIS labeling:

Occupational Safety and Health Administration (OSHA)
29 CFR 1910.1200 hazardous chemical: Yes

US Federal regulations:
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA (Superfund) reportable quantity: None

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories:
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance: No
Section 311 hazardous chemical: Yes

Clean Air Act (CAA): Not available
Clean Water Act (CWA): Not available
State regulations:
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Inventory name

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
### 16. Other Information

| **Disclaimer** | Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document. |
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| **Prepared by** | Dell Tech Laboratories Ltd. (519) 858-5021 |
| **Other information** | For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document. |