MATERIAL SAFETY DATA SHEET Issue Date: May 4, 2002

Identity: (As used on label and list)

RUSTECO GEL

SECTION I: Material & Manufacturer Identification

Product Name	RUSTECO GEL
Material Type	GEL
Product Use	ALL METALS RUST REMOVAL/PROTECTION METAL POLISH/PRIMER
Manufacturer Address	RUSTECO LLC 2390 Crenshaw Blvd # 260 Torrance, CA 90501
Emergency Phone	800-787-8326
Fax	310-294-9635
E-mail	rusteco@aol.com

SECTION II: Hazardous Ingredients & Identity Information

Hazard Data OSHA PEL	**ACGIH TLV**
Based on constituent data:	Oral LD50= (RAT) 1.26 g/Kg Skin PIS (RBT) = Moderate Eye Irritation (RBT) = Severe
Ingredients	Liquid Extract from organically grown plants
Made from ingredients generally regarded as safe or permissible under CFR 21/178.1010 and CFR 21/182 respectively	
DOT Hazard Class:	Not Regulated
Biodegradability:	Biodegradable
Corrosiveness:	Non-Corrosive

SECTION III: Physical/Chemical Characteristics

Boiling Point	220 F
Solubility in Water	Infinite
Appearance	Light Colorless Gel
pH of 1% solution	5-6
Density	1.04

SECTION IV: Fire and Explosion Data

Flash Point (Methods Used)	Flammable Limits	LEL	UEL
N/A Aqueous	N/A	N/A	N/A

Special Fire Fighting Procedures

None

Hazardous Combustion Products

Carbon Dioxide, Carbon Monoxide

SECTION V: Reactivity Data

Stability

Stable under normal conditions

Conditions to avoid

Excessive heat

Incompatibility (Materials to avoid)

None known

Hazardous Decomposition or By-products

None known

Hazardous Polymerization

Will not occur

Conditions to avoid

Excessive heat

Exposure from routine use

This product is not hazardous under normal conditions of use

Effects of overexposure

Prolonged exposure to vapor or mist may cause irritation in eyes, nose, mouth and/or throat.

Emergency and First Aid procedures

Eye Contact: Rinse immediately with water. Remove contact lenses, then flush eyes immediately with water for at least 15 minutes, including under the eyelids. Consult a physician if necessary.

Skin Contact: Wash skin with soap and water. Seek medical attention if irritation persists. Launder contaminated clothing before reuse.

Inhalation: Remove to fresh air. Rest in half upright position. Seek medical attention if necessary.
Ingestion:

Rinse mouth. Immediately dilute by drinking large amounts of water. After dilution induce vomiting. Seek immediate medical attention. Never give anything by mouth to an unconscious person.

SECTION VII: Toxicity Data

Oral: This material may be slightly toxic if ingested

Dermal: This material may be mildly irritating to the skin

Inhalation: This material is not known to be toxic by inhalation

Carcinogenicity: Not listed as a Carcinogen by IARC, NTP, ACGIH, OSHA

Other pertinent data: This material is a moderate eye irritant, and could cause possible corneal damage

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SECTION VIII: Special Protection Information

Personal protective equipment

Protective gloves: Rubber **Eye protection:** Safety glasses

Respiratory protection (specify type): None required under normal conditions of use

Other protective equipment: Not applicable

Ventilation: Local exhaust: General **Mechanical:** Not applicable

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SECTION IX: Spill, Leak and Disposal Procedures

Steps to be taken in case material is released or spilled:

Confine spillage and absorb on sand, sawdust or other available solids. Spills or release of this material does not currently trigger the emergency release reporting requirements under SARA Title III or CERCLA. State or local reporting requirements may differ from Federal requirements. Consult counsel for further guidance on your duties and responsibilities under these laws.

Waste Disposal Method

Dispose of absorbed material in accordance with all Federal, State and Local regulations. Dispose of water in contained water treatment system.
Resource Conservation and Recovery Act (RCRA) Requirements: N/A

SECTION X: Regulatory Information

FDA/USDA/CPSC: N/A **DOT:** Non-Regulated

TSCA: Mixture: All components of this solution are listed on the TSCA inventoryTSCA: Mixture: All components of this solution are listed on the TSCA inventory

Proper Shipping Name: Non-Regulated **Hazardous Class:** None

Label Requirements: None **ID No.:** None **Other Info:** N/A

EPA: Superfund Amendments & Reauthorization Act (SARA) Title III;
Section 313, Supplier Notification:

This product is known to contain the following chemicals, which are listed in 40 CFR 372.65 as toxic chemicals requiring notification:

Chemical Name	CAS #	Weight Percent
Not applicable	N/A	N/A

SECTION XI: Special Precautions and Comments

Avoid eye contact

Avoid contamination with Alkaline Material

Other Precautions: Not applicable

Registration or Certifications: Not applicable

IMPORTANT NOTICE

Please read carefully prior to use

The information and data herein are believed to be accurate and have been compiled from sources to be believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of usage, storage and handling of the product in compliance with Federal, State and Local laws and regulations. RUSTECO LLCMAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION AND DATA HEREIN. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED. TMT Services will not be liable for claims relating to any

party's use of or reliance on information and data contained herein, regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

RUSTECO LLC, 2390 Crenshaw Blvd # 260, Torrance, CA 90501

Effective Date: 05-04-02 Issue two RUSTECO GEL

Manufacturer's Environmental & Technical Specifications

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1) AQMD, State of California, Clean Air Solvent (CAS) eligibility determination by SCAQMD Method 313-91.
2) No restriction in transport or handling of this product under the guidelines established by organizations such as the UN, IMO, IATA and ICAO.
3) Approved by Municipality Department of Water Pollution Control or Health Department to discharge the used RUSTECO wastewater into the sewer system.
4) Effect on painted surfaces - No discoloration or softening.
5) Residual Corrosion - Average weight loss on aluminum insignificant.
6) Practical Cleaning - No streaking, spotting or discoloration; rinsed freely.
7) Stress Crazing of Acrylics - No crazing, cracking or attack.
8) Can be disposed without restrictions.
9) Pass the U.S. Environmental Protection Agency's *Method for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms;* under EPA/600/4-85/013. 0% (zero %) mortality during the 96 hours test period.
10) Effect on Tensile Strength of 7075-T6 aluminum - No significant loss in tensile strength as a result of the exposure to the GEL.
11) The product provides protection against new oxidation, while it is removing existing rust.
12) It can be applied with any spray application without damaging the lines or spray pump, as it does not contain any abrasive, aggressive ingredients.

RUSTECO GEL Fact Sheet
Corrosion Treatment & Protection

The RUSTECO GEL Corrosion Treatment is a gel designed to remove oxidation corrosion from any type of metal, including iron, carbon and alloy steels, aluminum, bronze and tin. This product has many attributes that make it superior to conventional corrosion removal methods in most applications. The RUSTECO GEL Corrosion Treatment:

i) Is highly effective in neutralizing and removing oxidized metal. Analysis of treated parts using a

Scanning Electron Microscope reveals negligible corrosion remaining, even in oxidation sites in pitted metal.

ii) Is extremely environmentally friendly. The GEL is manufactured from 80% recycled and reclaimed waste material and is completely biodegradable. Finally, after removal of any sediment, the used GEL is safe enough for the environment that it can be used as a plant fertilizer or can be disposed of into any water treatment system.

iii) Is completely benign to any material other than oxidized metal. The GEL can come into long term contact with non-oxidized finished metal surfaces, plastics, rubber, paint or human skin without any undesirable effects.

iv) Has a simple and inexpensive application method and can be safely applied in many situations where conventional methods are not possible. It is applied in the same fashion as paint with brushes, rollers or airless sprayers. Because it selectively only attacks the oxidized metal, there is no metal loss during this treatment. This is critical in situations where close tolerances are maintained or where metal loss could compromise the safety of a steel structure. Its benign nature allows the GEL to be applied in cases where other materials (such as rubber, gaskets, chrome etc) are attached to the oxidizing part.

v) Has no OSHA or DOT shipping, storage, handling restrictions and is easily disposed of. This translates directly into cost and time savings in term of paperwork, specialized labor and auxiliary services.

vi) Acts as a corrosion inhibitor. Unlike machining, grit blasting and highly acidic or alkaline solutions, where corrosion begins immediately after treatment, surfaces treated with the GEL can be stored without ill effects.

vii) The formulation of the RUSTECO GEL is proprietary and cannot be described beyond saying that it contains a food grade acid and a Xanthan gum. It can be used in any sprayer or conduit at ambient or high temperatures. The application only requires that the area to be treated be brought into contact with the GEL.

viii) Designed specifically to apply it to any vertical structure or part that due to its shape, size or design cannot be submerged. It is applied either in a brush on mode or, for large industrial surfaces, such as storage or ballast tanks, with an airless spray gun. The GEL has a viscosity similar to paint and will cover about 70 sq. ft. with one gallon.

ix) For small parts cleaning the GEL can just be brushed off with a scouring pad and then wiped dry. For light surface rust it should be applied in two layers and stay on the metal for 20-60 minutes.

x) For heavy industrial cleaning, such as large tanks, bridges, huge steel plates and similar structures the GEL will be applied with an airless spray gun. In order to obtain a good adhesion, the application process is to be made in three layers at a thickness of 10 mils each. 30-45 minutes should elapse between the first and second application and the same shall apply for the final third layer. The GEL will then cure for 72 hours, during which time a color change will be observed, first to light green, then dark green and finally black. At that time the GEL can be removed using a standard industrial pressure washer, ranging from 3200-psi (240-bar) to 10,000-psi (700-bar), depending on the severity of rust build up.

xi) The RUSTECO GEL can also be used in conjunction with any of these methods:

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a) **Grit Blasting:** Apply the GEL three (3) days prior to the actual blasting in all locations to be blasted or in just those places that are hard to access as back of beams, ladders, ladder platform etc. The GEL is removed during the blasting process and this technology will increase the production rate by about 40%.

b) **UHP Blasting:** Even at 40,000-psi pressure, the production rate for this type of cleaning is still rather low. By pre-applying the GEL to surfaces that will be blasted with Ultra-High Pressure (in

excess of 36,000-psi), it will be possible to clean the same area at a fraction of the normal cleaning time.

c) **Power Tooling:** In many applications power tooling is still a method applied to remove rust from ship tanks and other structures. The GEL application prior to commencing the power tooling will greatly enhance and speed up the rust removal process. In fact, based on past experience, a tank can be completed at a much faster rate when using the RUSTECO GEL technology.

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xii) The GEL will provide a paintable surface in accordance with standards as accepted by coating companies.

xiii) No flash rust will occur.

xiv) The GEL has no disposal restrictions and can be pumped over the side, provided no other contaminants have been removed from the metal.