LYMAN PRODUCTS: RAYTECH DIVISION

SAFETY DATA SHEET

Safety Data Sheet (conforms to Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 2015/830), US 29CFR1910.1200, Canada Hazardous Products Regulation

Date Issued: 11/4/15 Date Revised: 5/16/19 Revision Number: Rev 1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier			
Trade Name	CR Cleaning Solution		
Product Number	23-102		
1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against			
Product Use:	Rust and Oxidation Remover		
Restrictions on Use:	None known		
1.3 Details of the Supplier of the Safety Data	a Sheet		
Manufacturer:	Lyman Products		
	Raytech Division		
	475 Smith Street		
	Middletown, CT 06457 USA		
Information Phone Number:	(860) 632-2020		
E-mail			
1.4 Emergency Telephone Number			
Emergency Spill Information	For Hazardous Materials [or Dangerous Goods] Incident		
C <i>f</i> i	Spill, Leak, Fire, Exposure, or Accident		
	Call ChemTel Inc. Day or Night		
	Within the USA and Canada: 1-800-255-3924 or		
	Outside the USA at +1-813-248-0585 (collect calls accepted)		
	Shipments within: Australia – 1-300-954-538, Brazil 0-800-591-6042, China 400-		
	120-0751, India 000-800-099-0731		
	Reference Contract Number: MIS3953100		

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

US Hazard Classification (29CFR 1910.1200-2012): Eye Irritant Category 2A

GHS/CLP (1272/2008) Classification: Eye Irritant Category 2 (H319)

2.2 Label Elements



Contains: Citric Acid

Hazard Statements	Precautionary Phrases
H319 Causes serious eye irritation	P264 Wash thoroughly after handling.
	P280 Wear eye protection.
	P305+P351+P338 IF IN EYES: Rinse cautiously with water for
	several minutes. Remove contact lenses, if present and easy
	to do. Continue rinsing.
	P337+P313 If eye irritation persists: Get medical attention.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Name	CAS#	EINECS#	GHS/CLP Classification	% w/w
Citric Acid	77-92-9	201-069-1	Eye Irritant Category 2 (H319)	10-20

The exact percentage and composition is a trade secret

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye: Flush eyes thoroughly with water for at least 15 minutes. Get medical attention if irritation occurs and persists. **Skin:** No first aid should be needed. If irritation occurs, wash contact area with soap and water. Get medical attention if irritation or symptoms of exposure develop and persist.

Inhalation: No first aid should be needed. If irritation from mist or vapor occurs and persists, get medical attention. **Ingestion:** No harmful effects are expected. If symptoms occur, get medical attention.

4.2 Most Important symptoms and effects, both acute and delayed: May cause serious eye irritation. May cause mild skin and respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate first aid should not be needed.

SECTION 5: FIRE AND EXPLOSION DATA

5.1 Extinguishing Media: Dry chemical, foam, carbon dioxide and water fog are recommended.

5.2 Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards: None known. Combustion Products: Thermal decomposition or combustion may generate acrid smoke and oxides of carbon and nitrogen.

5.3 Advice for Fire-Fighters:

Special Fire Fighting Procedures: Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing for all fires involving chemicals.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Seek to ensure ventilation that minimizes exposure. Keep unprotected persons away. Although the substance has no or very low acute toxicity hazard, it is advised to avoid contact with skin, eyes, and clothing. Wear suitable protective equipment when needed.

6.2 Environmental Precautions:

Avoid release to the environment. Report spills and releases as required to appropriate authorities.

6.3 Methods and Material for Containment and Cleaning Up:

Collect spilled material in suitable containers for recovery or disposal. In the case of disposal, spilled material or contaminated material should be disposed of as waste as described in Section 13.

6.4 Reference to Other Sections: Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling: Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice. Wear appropriate personal protective equipment.

7.2 Conditions for Safe Storage, Including any Incompatibilities: Store in a dry area away from incompatible materials.

7.3 Specific end use(s): None specified

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters: Refer to country-specific legislation for specific requirements where not listed below.

Chemical Name	Exposure Limits	
Citric Acid	None Established	

8.2 Exposure Controls:

Appropriate Engineering Controls: General exhaust ventilation should be adequate to minimize exposure.

Respiratory Protection: None required for normal use. If needed, an approved respirator may be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Skin Protection: Impervious gloves are recommended if needed to avoid prolonged contact.

Eye Protection: Safety goggles recommended where eye contact is possible.

Other Protective Equipment: None should be needed under normal use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Appearance: Pale yellow liquid	Vapor Density: No data available
Odor: Faint odor	Specific Gravity: 1.13
Odor Threshold: No data available	Solubility: Complete
pH: 3.2 – 3.6 (concentrate), 3.3 – 3.7 (5% solution)	Octanol/Water Partition Coefficient: No data available
Melting Point/Freezing Point: No data available	Autoignition Temperature: No data available
Boiling Point: No data available	Decomposition Temperature: No data available
Flash Point: No data available	Viscosity: Not applicable
Evaporation Rate: <1	Explosive Properties: Not explosive
Flammable Limits: LEL: No data available	Oxidizing Properties: Not an oxidizer
UEL: No data available	
Vapor Pressure: No data available	Flammability (solid, gas): Not applicable

9.2 Other Information: None available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Not reactive under regular storage and handling conditions.

10.2 Chemical Stability: Stable under regular storage and handling conditions.

10.3 Possibility of Hazardous Reactions: Citric acid may react explosively with metal nitrates.

10.4 Conditions to Avoid: Avoid extremely low temperatures as crystallization may occur. Avoid contact with alkalis. Avoid contact with acid reactive materials (ex: cyanides and oxidizers)

10.5 Incompatible Materials: Alkalis, cyanides and reactive metals.

10.6 Hazardous Decomposition Products: Thermal decomposition or combustion may generate acrid smoke and oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

Eye Contact: Contact may cause serious eye irritation, redness and tearing.
Skin Contact: No adverse effects expected.
Inhalation: Inhalation of mist or vapor may cause slight nose, throat and respiratory irritation.

Ingestion: Not expected to be harmful. Ingestion of large amounts may cause gastrointestinal distress.

Acute Toxicity Values:

Citric Acid: Oral mouse LD50: 5400 mg/kg, dermal rat LD50 > 2000 mg/kg.

Skin corrosion/irritation: No data available for mixture. Product is not classified as a skin irritant.

Eye damage/irritation: No data available for mixture. Product is classified as an eye irritant.

Respiratory Irritation: No data available for mixture. Product is not classified as a respiratory irritant.

Respiratory Sensitization: No data available for mixture. Product is not classified as a skin sensitizer.

Skin Sensitization: No data available for mixture. Product is not classified as a respiratory sensitizer.

Germ Cell Mutagenicity: No data available for mixture. Product is not classified as a germ cell mutagen.

Carcinogenicity: None of the components of this product present at 0.1% or greater are listed as carcinogens by OSHA, IARC, NTP, ACGIH and the EU CLP.

Reproductive Toxicity: No data available for mixture. Product is not classified as a reproductive toxin.

Aspiration Hazard: No data available for mixture. Product is not classified as an aspiration hazard.

Specific Target Organ Toxicity:

Single Exposure: No data available

Repeat Exposure: No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Citric Acid: Leuciscus idus melanotus LC50: 440 mg/L/48hr.

12.2 Persistence and Degradability: Citric Acid: Readily biodegradable 97% in 28 days.

12.3 Bioaccumulative Potential: Citric Acid: Not expected to bioaccumulate

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB Assessment: Not required

12.6 Other Adverse Effects: None known

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

Dispose in accordance with all local, state and national regulations.

SECTION 14: TRANSPORTATION INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not regulated	N/A	N/A	None
Canadian TDG	None	Not regulated	N/A	N/A	None
EU ADR/RID	None	Not regulated	N/A	N/A	None
IMDG	None	Not regulated	N/A	N/A	None
IATA/ICAO	None	Not regulated	N/A	N/A	None

14.6 Special Precautions for User: Not applicable

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Acute Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on TSCA.

STATE REGULATIONS:

California Proposition 65: This product contains the following substances known to the State of California to cause cancer, birth defects or other reproductive harm: Methanol CAS: 67-56-1

INTERNATIONAL REGULATIONS:

Canadian Environmental Protection Act: All of the components are listed on the Canadian Domestic Substances List. **European Union:** All of the components are listed on the European Inventory of New and Existing Chemical Substances (EINECS) inventory.

Australia: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances (AICS). **China:** All of the ingredients of this product are listed on the Inventory of Existing Chemical Substance in China (IECSC). **Korea:** All of the components of this product are listed on the Korean Existing Chemical List (KECL).

Japan: All of the components of this product are listed on the Japanese Existing and New Chemical Substances List (ENCS). New Zealand: All of the ingredients of this product are listed on the New Zealand Inventory of Chemicals (NZIoC).

Philippines: All of the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

German WGK: 1

SECTION 16: OTHER INFORMATION

HMIS Ratings:	Health - 2	Flar
NFPA Ratings:	Health - 2	Flar

Flammability - 0 Flammability - 0 Physical Hazard - 0 Stability - 0

Supersedes: None Date Updated: 11/4/15 Revision Summary: New document.

GHS Classification for Reference (See Sections 2 and 3): H319 Causes serious eye irritation

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Lyman Products shall not be held liable for any damage resulting from handling or from contact with the above product.