LYMAN PRODUCTS

SAFETY DATA SHEET

Safety Data Sheet (in compliance with Regulation (EC) 1907/2006, Regulation (EC) 1272/2008 and Regulation (EC) 2015/830),

Date Issued: 9/9/15
Date Revised: None
Revision Number: New SDS

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

1.1 Product Identifier

Trade Name: Turbo Case Cleaner
Product Number: 7631340

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Case Cleaning Solution

Restrictions on Use: None known

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer: Lyman Products
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
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 or
+1 703-527-3887 (collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

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

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

2.2 Label Elements

Warning!

Contains: Citric Acid and Phosphoric 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
Phosphoric Acid	7664-38-2	231-633-2	Metal Corrosive Category 1 (H290) Skin Corrosive Category 1B (H314) Eye Damage Category 1 (H318)	<2
Citric Acid	77-92-9	201-069-1	Eye Irritant Category 2 (H319)	<2

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, phosphorus and nitrogen. Phosphorus converts to pyrophosphoric acid when heated to 213°C (415.4°F).

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 and maintains exposure below occupational exposure limits. 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
Phosphoric Acid	1 mg/m3 TWA ACGIH TLV, 3 mg/m3 STEL 1 mg/m3 TWA OSHA PEL 1 mg/m3 TWA EU OEL, 2 mg/m3 STEL 1 mg/m3 TWA UK WEL, 2 mg/m3 STEL 2 mg/m3 TWA DFG MAK (inhalable aerosol), 4 mg/m3 STEL (inhalable aerosol) France: 0.2 ppm TWA, 0.5 ppm STEL South Korea: 1 mg/m3 TWA, 3 mg/m3 STEL
Citric Acid	None Established

8.2 Exposure Controls:

Appropriate Engineering Controls: General exhaust ventilation should be adequate to maintain exposures below the occupational exposure limits.

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: Clear, orange liquid	**Vapor Density:** No data available
Odor: Orange odor	**Specific Gravity:** 1.023
Odor Threshold: No data available	**Solubility:** Complete
pH: 3.1 – 3.4	**Octanol/Water Partition Coefficient:** No data available
Melting Point/Freezing Point: No data available	**Autoignition Temperature:** No data available
Boiling Point: 200 - 215°F (93.3 – 101.6°F)	**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 **UEL:** No data available	**Oxidizing Properties:** Not an oxidizer
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. Keep from freezing. If product freezes, it will require thorough mixing before use, as stratification may occur.

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
Phosphoric acid: Oral rat LD50- 1530 mg/kg; Inhalation rat LC50- >850 mg/m3/1Hr; Skin rabbit LD50- 2740 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
Orthophosphoric Acid: 96 hr LC50 Mosquitofish- 138 mg/L

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: Releases above the RQ of 250,000 lbs (based on the RQ for Phosphoric acid of 5,000 lbs present at <2%) must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local 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: None

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	Flammability - 0	Physical Hazard - 0
NFPA Ratings:	Health - 2	Flammability - 0	Stability - 0

Date of Current Revision: 9/9/15
Revision Summary: New document.
Date of Previous: Revision: None

GHS Classification for Reference (See Sections 2 and 3):
H290 May be corrosive to metals
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H319 Causes serious eye irritation

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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.