

MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: KRUD KUTTER® Metal Clean & Etch

Synonyms: Not applicable

Molecular Formula: Not applicable

Molecular Weight: Not applicable

Supplier:

Supreme Chemicals of Georgia, Inc.
1535 Oak Industrial Lane, Suite B
Cumming, GA 30041
USA

Emergency Telephone:

(CHEMTREC) 800-424-9300
(Non-emergency Telephone) 800- 466-7126

Intended Use: Cleaning agent

2 HAZARDS IDENTIFICATION

Emergency Overview

Physical State: Liquid

Color: Translucent orange

Odor: Slight Phosphoric Acid odor

WARNING!

Causes skin and eye irritation.

Mist or vapors irritating to eyes and respiratory tract.

Potential Health Effects

Inhalation: Mist or vapor irritating to eyes and respiratory tract. Exposure may cause coughing, asthmatic breathing and irritation.

Eye Contact: Causes eye irritation. Exposure may cause eye tearing, redness and discomfort.

Skin Contact: Causes skin irritation. Exposure may cause redness, itching and inflammation.

Ingestion: Not expected to be an ingestion hazard for intended use. Exposure may cause gastrointestinal irritation, nausea, vomiting, diarrhea and other systemic effects.

Chronic Health Effects: None known

Target Organ(s): Eye, skin, respiratory tract

OSHA Regulatory Status: Hazardous; consumer product use is exempt.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight %
phosphoric acid	7664-38-2	< 40 %

Components not listed are not hazardous or are below reportable limits

4 FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms persist.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head lower than the hips to help prevent aspiration. Never give anything by mouth to an unconscious person. Get medical attention.

5 FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, carbon dioxide, dry chemical or alcohol foam

Unsuitable Extinguishing Media: None known

Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Unusual Fire & Explosion Hazards: None known

Hazardous Combustion Products: Carbon oxides, phosphorous oxides

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate personal protective equipment. See Section 8.

Spill Cleanup Methods: Small Liquid Spills: Wipe up or use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Large Spillages: Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use water spray to reduce vapors or divert vapor cloud drift. Isolate and stay upwind. Ventilate enclosed areas. Keep unauthorized personnel away. Prevent entry into waterways, sewer, basements or confined areas.

7 HANDLING AND STORAGE

Handling: Avoid breathing mist or vapors. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: None

Storage: Keep container closed. Store in original container. Keep out of reach of children.

8	EXPOSURE CONTROLS / PERSONAL PROTECTION
----------	--

Industrial Exposures:

Exposure Limits:

Chemical Name	Source	Type	Exposure Limits	Notes
phosphoric acid	NIOSH	REL	1 mg/m ³	--
phosphoric acid	NIOSH STEL		3 mg/m ³	--
phosphoric acid	NIOSH IDLH		1000 mg/m ³	--
phosphoric acid	ACGIH TWA		1 mg/m ³	Upper respiratory tract eye & skin irritant
phosphoric acid	ACGIH STEL		3 mg/m ³	Upper respiratory tract eye & skin irritant
phosphoric acid	OSHA	Z-1 PEL	1 mg/m ³	--
phosphoric acid	California	TWA	1 mg/m ³	--
phosphoric acid	California STEL		3 mg/m ³	--
phosphoric acid	Alberta, Canada	TWA	1 mg/m ³	Irritation
phosphoric acid	Alberta, Canada	STEL	3 mg/m ³	Irritation
phosphoric acid	British Columbia, Canada	TWA 1	mg/m ³	--
phosphoric acid	British Columbia, Canada	STEL 3	mg/m ³	--
phosphoric acid	Ontario, Canada	TWA	1 mg/m ³	--
phosphoric acid	Ontario, Canada	STEL	3 mg/m ³	--
phosphoric acid	Quebec, Canada	TWA	1 mg/m ³	--
phosphoric acid	Quebec, Canada	STEL	3 mg/m ³	--
phosphoric acid	Mexico TWA		1 mg/m ³	--
phosphoric acid	Mexico STEL		3 mg/m ³	--

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: Wear splash goggles and a face shield or safety glasses with side shields.

Hand Protection: Wear chemical resistant gloves.

Skin Protection: Wear protective clothing appropriate for the risk of exposure.

Hygiene Measures: Eye wash, washing facilities, safety shower

9 PHYSICAL AND CHEMICAL PROPERTIES

Color: Translucent orange

Odor: Slight Phosphoric Acid odor

Physical State: Liquid

pH: No data available

Boiling Point: 218° C (424.4° F)

Melting Point: < -1.1° C (30° F)

Flash Point: None

Evaporation Rate: < 1 (Water = 1)

Flammability: None

Flammability Limit – Upper (%): Not applicable

Flammability Limit – Lower (%): Not applicable

Vapor Pressure: 17 mm Hg (@ 20 °C) (68° F)

Vapor Density (Air=1): 3.2

Specific Gravity: 1.1 – 1.3

Solubility in Water: Complete

Partition Coefficient (n-Octanol/water): No data available

Autoignition Temperature: Not applicable

Decomposition Temperature: No data available

Volatile Organic Compounds (VOC): 12g/L

Viscosity: No data available

Percent Volatile: 1%

10 STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: None known

Incompatible Materials: Strong oxidizing agents, alkalis

Hazardous Decomposition Products: Carbon oxides, phosphorous oxides

Possibility of Hazardous Reactions: Will not occur.

11 TOXICOLOGICAL INFORMATION

Information available upon request.

Listed Carcinogens: None

12 ECOLOGICAL INFORMATION

Krud Kutter® Metal Clean & Etch is biodegradable.

13 DISPOSAL CONSIDERATIONS

General Information: Dispose in accordance with applicable federal, state, and local regulations.

Disposal Methods: No specific disposal method required.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14 TRANSPORT INFORMATION

DOT: ORM-D

Proper Shipping Name: Consumer Commodity

Packaging Requirements: Inner packagings not over 5.0 Liters (1.3 Gallons) net capacity each for liquids, and packed in strong outer packagings.

Packages over 5.0 Liters (1.3 Gallons):

UN-Number: 1805

Proper Shipping Name: Phosphoric Acid Solution

Class: 8

Packaging Group: III

Emergency Response Guide Number: 154

TDG:

UN-Number: 1805

Proper Shipping Name: Phosphoric Acid Solution

Class: 8

Packaging Group: III

Emergency Response Guide Number: 154

IATA:

For Limited Quantities of liquids of Class 8 Packing Group III:

Passenger & Cargo Aircraft Packing Instructions: Y819

Passenger & Cargo Aircraft Limited Quantity Maximum Quantity Package: 1 Liter

Single packagings are not permitted. The inner packagings must be packed in one of the following outer packagings with sufficient cushioning/absorbent material so as to prevent movement/leakage. The maximum quantity must not exceeded. Inner packagings: glass earthenware, plastic, metal (not aluminum), or glass ampoule.

Outer Packaging: Steel packagings must be corrosion-resistant or with protection against corrosion. Glass or earthenware inner packagings and glass ampoules must be packaged with absorbent material in tightly closed metal or rigid plastic receptacles in outer packagings. Glass or earthenware inner packagings and glass ampoules are permitted if this item is free from hydrofluoric acid.

Outer Packaging: Drums: Steel, aluminum, plywood, fiber, plastic.

Jerricans: Steel, aluminum, plastic

Boxes: UN Certified Box, steel, aluminum, wood, plywood, reconstituted wood, fiber board and plastic

Passenger & Cargo Aircraft Packing Instructions: 819

Passenger & Cargo Aircraft Maximum Quantity/Package: 5 Liters

Single packagings are not permitted. The inner packagings must be packed in one of the following outer packagings with sufficient cushioning/absorbent material so as to prevent movement/leakage. The maximum quantity must not exceeded. Inner packagings: glass earthenware, plastic, metal (not aluminum), or glass ampoule.

Outer Packaging: Steel packagings must be corrosion-resistant or with protection against corrosion. Glass or earthenware inner packagings and glass ampoules must be packaged with absorbent material in tightly closed metal or rigid plastic receptacles in outer packagings. Glass or earthenware inner packagings and glass ampoules are permitted if this item is free from hydrofluoric acid.

Outer Packaging: Drums: Steel (1A2), aluminum (1B2), plywood (1D), fiber (1G), plastic (1H2).

Jerricans: Steel (4A), Aluminum (4B), Plastic (3H2);

Boxes: UN Certified Box, Steel (4A), aluminum (3B2), wood (4C1,4C2), plywood (4D), reconstituted wood (5F), fiber board (4G) and plastic (4H1, 4H2).

Cargo Aircraft Only Package Instruction: 821

Cargo Aircraft Only Maximum Quantity/Package: 60 Liters

Combination and single packagings are permitted. The inner packagings must be packed in one of the following outer packagings with sufficient cushioning/absorbent material so as to prevent movement/leakage. Combination packagings: inner packagings: Glass or earthenware, plastic, metal (not aluminum) or glass ampoule.

Outer packaging: Drums: Steel (1A2), aluminum (1B2), plywood (1D), fiber (1G), plastic (1H2).

Jerricans: Steel (3A2), aluminum (3B2), plastic (1H2);

Boxes: UN Certified Box, steel(4A), aluminum (4B), wood (4C1,4C2), plywood (4D), reconstituted wood (4F), fiber board (4G) and plastic (4H1, 4H2).

Special Provisions: A3

ERG Code: 8L

Packages over 5.0 Liters (1.3 Gallons):

UN-Number: 1805

Proper Shipping Name: Phosphoric Acid Solution

Class: 8

Packaging Group: III

Emergency Response Guide Number: 154

IMDG:

Limited Quantities Exception: Dangerous Goods in limited quantities of Class 8.

Limited quantities must be packed in combination packaging. The inner packaging must be within the quantity limit specified in the Dangerous Goods List (DGL) for the substance being prepared for shipment and be packaged in suitable outer packaging (i.e. UN certified box). The gross mass of the package must not exceed 30 kilograms (66 pounds).

For over 30 kilograms (66 pounds):

UN-Number: 1805

Proper Shipping Name: Phosphoric Acid Solution

Class: 8

Packaging Group: III

EMS No: F-A, S-B

Special Provision: 223

Packing Instructions: P001, LP01

IBC 03

Portable tanks and bulk containers:

IMO Tank Instructions: T3

UN Tank Instructions: T4

Provisions: TP1

Stowage and Segregation: Category A

15 REGULATORY INFORMATION

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

WHMIS Classification: D2B

Mexico: Hazard Identification Guidance List: Phosphoric Acid: 3-0-0 PPE: F

Inventory Status

This product or all components are listed on the following inventory: TSCA

DSL Inventory: No information available

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4):

Component	Reportable Quantity
phosphoric acid	5,000 lbs

SARA Title III

Section 302Extremely Hazardous Substance (40 CFR 355, Appendix A): None

Section 311/312 (40 CFR 370):

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

Section 313 Toxic Release Inventory (40 CFR 372): None

Clean Air Act (CCA) Section 112, 1990 Amendments, Statutory Hazardous Air Pollutants: None

Clean Air Act (CAA) Section 112(i) High-Risk Hazardous Air Pollutants (40 CFR 63.74): None

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None

Clean Water Act Section 307 Toxic Pollutants (40 CFR 401.15): None

Clean Water Act Section 311 Hazardous Chemical (40 CFR 116.4): Phosphoric acid

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):

Component	Reportable Quantity
phosphoric acid	5,000 lbs

Drug Enforcement Act: None

TSCA: None

State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): None

Massachusetts Right-To-Know List: Phosphoric Acid

Minnesota Hazardous Substances List: Phosphoric Acid

New Jersey Right-To-Know List: Phosphoric Acid

Pennsylvania Right-To-Know Substances: Phosphoric Acid

16	OTHER INFORMATION
-----------	--------------------------

Hazard Ratings

	Health Hazard	Fire Hazard	Reactivity Hazard	Special Hazard
NFPA	2 0		0	N/A

	Health Hazard	Fire Hazard	Reactivity Hazard
HMIS	2 0		0

0 – Minimal; 1 – Slight; 2 – Moderate; 3 – Serious; 4 – Severe; *- Chronic health effect

Revision Information: New

Prepared by: Supreme Chemicals of Georgia, Inc.

Issue Date: 6/08/11

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.