

**KANO LABORATORIES LLC
SAFETY DATA SHEET**

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: EXRUST

Product Use: Rust Remover

Manufacturer: Kano Laboratories LLC
1000 E. Thompson Lane
Nashville, TN 37211

Emergency Phone Number: Chemtrec 1 (800) 424-9300

Manufacturer Phone Number: 615-833-4101

Website: www.kroil.com

SDS Date of Preparation: July 19, 2021

SECTION 2: HAZARDS IDENTIFICATION

GHS / HAZCOM 2012 Classification:

Health	Physical
Skin Corrosion Category 1B Eye Damage Category 1	Corrosive to Metals Category 1

Label Elements

Danger!



Contains Phosphoric Acid

Causes severe skin burns and eye damage.

May be corrosive to metals.

Keep only in original packaging.

Do not breathe mists.

Wash thoroughly after handling.

Wear protective gloves, protective clothing, eye protection and face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER,

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Wash contaminated clothing before reuse. Immediately call a POISON CENTER

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Immediately call a POISON CENTER

Absorb spillage to prevent material damage.

Store locked up.

Dispose of contents or container in accordance with local or national regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	%
Inert, Non-Hazardous Ingredient	Proprietary	40-70
Phosphoric Acid	7664-38-2	20-30
Dipropylene Glycol Monopropyl Ether	29911-27-1	5-10
Triethanolamine	102-71-6	1-5
Tetrasodium pyrophosphate	7722-88-5	1-5
Surfactant	Proprietary	1-5

The specific identity and/or exact percentage has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

Eye Contact: Immediately flush eyes thoroughly with water for at least 20 minutes, holding the eye lids open to be sure the material is washed out. Get immediate medical attention.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water for 15 minutes. Get immediate medical attention. Launder clothing before re-use. Discard leather and other items that cannot be decontaminated.

Inhalation: Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

Ingestion: DO NOT induce vomiting. If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.

Most important symptoms and effects, acute and delayed: Corrosive. May cause severe tissue irritation and destruction to eyes, skin and lungs. Ingestion can lead to gastrointestinal burns and death.

Indication of immediate medical attention and special treatment, if needed: If contact occurs or if swallowed, get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use any media that is suitable for the surrounding fire.

Specific Hazards Arising from the Chemical: Not flammable or combustible. May react with common metals to produce hydrogen gas which is flammable and explosive.

Special Protective Equipment and Precautions for Fire-fighters: Wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, Protective equipment, and Emergency procedures: Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed.

Methods and Materials for Containment and Cleaning up: Ventilate area. Contain spill and carefully neutralize with soda ash. CAUTION! Heat is generated during neutralization. Collect with an inert absorbent material and place in an appropriate container for disposal. Wash residual traces with water. Prevent release into sewers, watercourses, and groundwater. Report spills and releases as required to appropriate authorities.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Prevent contact with the eyes, skin and clothing. Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Wash exposed skin thoroughly with soap and water after use. Keep product away from excessive heat. Keep containers closed when not in use.

OTHER PRECAUTIONS: Do not reuse containers. Follow all SDS precautions in handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, dry, well-ventilated location away from incompatible materials. Keep containers closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Chemical Name	Exposure Limits
Inert, Non-Hazardous Ingredient	None Established
Phosphoric Acid	1 mg/m ³ TWA OSHA PEL 1 mg/m ³ TWA, 3 mg/m ³ ACGIH TLV-STEL
Dipropylene Glycol Monopropyl Ether	None Established
Triethanolamine	5 mg/m ³ ACGIH TLV-TWA
Tetrasodium pyrophosphate	None Established
Surfactant	None Established

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to maintain concentrations below the occupational exposure limits.

Personal Protective Equipment:

Respiratory Protection: If needed, a NIOSH approved dust/mist respirator may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Hand protection: Impervious gloves are recommended.

Eye Protection: Chemical safety goggles required.

Skin Protection: Impervious clothing with long sleeves as required to prevent skin contact and contamination of personal clothing.

Hygiene measures: Suitable eye wash and washing facilities should be available in the work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless liquid	Odor:	Odorless
Odor Threshold:	Not available	pH:	~1.5
Melting/Freezing Point:	Not available	Boiling Point/Range:	200°F
Flash Point:	Not flammable	Evaporation Rate:	<1
Flammability: (Solid, Gas)	Not applicable	Flammability Limits:	N/A
Vapor Pressure:	<1 mmHg @ 68°F	Vapor Density:	Not determined
Relative Density:	1.3	Solubilities:	Soluble in Water
Partition Coefficient:	Not available	Autoignition	Not flammable
(N-Octanol/Water)		Temperature:	

**Decomposition
Temperature:**

Not available

Viscosity:

Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: None known.

Chemical Stability: Stable under normal conditions of storage or use.

Possibility of Hazardous Reactions: None known.

Conditions to avoid: Avoid excessive heat.

Incompatible Materials: Avoid strong oxidizing agents, fluorine, strong reducing agents, bases, metals, sulfur trioxide, and phosphorus pentoxide.

Hazardous decomposition products: Thermal decomposition may produce oxides of phosphorus, nitrogen and carbon

SECTION 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eye: Corrosive. Causes severe eye irritation or burns. Permanent damage to the cornea and blindness may occur.

Skin: Cause severe skin irritation and burns.

Inhalation: May cause severe lung irritation and burning, shortness of breath, and fluid in the lungs.

Ingestion: May cause severe irritation and lead to nausea, vomiting, diarrhea, corrosion, burns to the mouth and esophagus, abdominal pain, chest pain, shortness of breath, seizures, and death.

Carcinogenicity Listing: None of the components of this product at greater than 0.1% are listed as carcinogens by OSHA, IARC or NTP.

Chronic Hazards: Prolonged or repeated exposure may cause effects on the kidney and liver. This product contains a chemical that in animal studies caused effects on fertility, but only at exposure levels that were severely harmful the adult animal. There is no evidence of adverse fetal or reproductive effects in humans.

Acute toxicity: Toxicological testing has not been performed on this product as a mixture.

Acute Toxicity Values Oral LD50 = 5858; Dermal LD50 = 7201 mg/kg.

Phosphoric Acid: Oral rat LD50 2600 mg/kg; Dermal rabbit LD50 2740 mg/kg

Dipropylene Glycol Monopropyl Ether: Oral rat LD50 >2000 mg/kg Dermal rabbit LD50 >2000 mg/kg.

Triethanolamine: Oral rat LD50 6400 mg/kg; Dermal rabbit LD50 > 2000 mg/kg

Tetrasodium pyrophosphate: Oral rat LD50 500 mg/kg; Inhalation Rat LC50 >1.1 mg/L/4 hr.; Dermal rabbit LD50 >2000 g/kg.

Surfactant: No toxicity data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: No toxicity data available for the product.

Phosphoric Acid: 96 hr LC50 *Oryzias latipes* 75.1 mg/L; 48 hr EC50 *daphnia magna* >100 mg/L; 72 hr EC50

Desmodesmus subspicatus >100 mg/L

Dipropylene Glycol Monopropyl Ether: 96 hr LC50 *Oncorhynchus mykiss* >100 mg/L, 48 hr EC50 *daphnia magna* >100 mg/L, 96 hr EC50 *Pseudokirchneriella subcapitata* >1000 mg/L

Triethanolamine: 96 hr LC50 *Pimephales promelas* 11800 mg/L; 48 hr EC50 *Ceriodaphnia dubia* 609.88 mg/L; 72 hr EC50 *Desmodesmus subspicatus* 216 mg/L

Tetrasodium pyrophosphate: 96 hr LC50 *Oncorhynchus mykiss* >100 mg/L; 48 hr EC50 *daphnia magna* >100 mg/L; 72 hr EC50 *Desmodesmus subspicatus* >100 mg/L (Structurally similar chemical);

Surfactant: No toxicity data available but considered toxic to aquatic organisms.

Persistence and Degradability: Triethanolamine (89% in 14 days) and dipropylene glycol monopropyl ether are readily biodegradable. Biodegradation is not applicable to inorganic substances such as phosphoric acid, and tetrasodium pyrophosphate. Surfactant is not readily biodegradable.

Bioaccumulative Potential: Triethanolamine has a calculated BCF is <3.4.

Mobility in Soil: Triethanolamine is a high mobility in soil.

Other Adverse Effects: None known

SECTION 13: DISPOSAL INFORMATION

Disposal instructions: Dispose of product in accordance with all local, state/provincial and federal regulations.

Contaminated packaging: Offer rinsed packaging material to local recycling facilities.

SECTION 14: TRANSPORT INFORMATION

Containers not over 1.3 gallons:

DOT Shipping Name: Limited Quantity

Containers over 1.3 gallon capacity:

DOT Shipping Name: Phosphoric Acid Solution

DOT Hazard Class/Packing Group: 8, III

UN Number: UN1805

DOT Labels Required (49CFR172.101): Class 8

Hazardous Substance (49CFR172.101): Phosphoric Acid

Reportable Quantity: 16,660 lbs

DOT Marine Pollutants: This product does not contain marine pollutants as defined in 49CFR 171.8.

IMDG Shipping Name: Phosphoric Acid Solution

IMDG Hazard Class/Packing Group: 8, III

UN Number: UN1805

IMDG Hazard Labels Required: Class 8

IATA Shipping Name: Phosphoric Acid Solution

IATA Hazard Class/Packing Group: 8, III

UN Number: UN1805

IATA Hazard Labels Required: Class 8

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: The RQ for this product is 16,660 lbs (based on a maximum concentration of phosphoric acid of 30%, RQ=5,000 lbs). 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: Refer to Section 2 for the OSHA Hazard Classification

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 the TSCA inventory.

SECTION 16: OTHER INFORMATION

HMIS Ratings: Health - 3	Flammability - 0	Physical Hazard- 0
NFPA Ratings: Health - 3	Flammability - 0	Instability - 0

SDS Revision History: Revisions to Sections 2, 3, 5, 6, 7, 8, 14.

Date of preparation: July 19, 2021

Date of previous revision: October 5, 2016

The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.