Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product Name: CR-1010
Description Corrosion Remover/Etch
Product Number: 0000005

MSDS Revision: 0003
Revision Date: 1/25/2022

Product Use: Industrial, Manufacturing or Laboratory use
Manufacturer: Aero Clean Technologies, LLC
1320 Stephenson Ave
Lynchburg, VA 24501
For More Information Call: 434-381-0699 (Monday-Friday 7:00-6:00)
In Case of Emergency Call: 765-271-0430 (24 Hours/Day, 7 Days/Week)

WHMIS Classification / Symbol:
D-2A : Materials Causing Other Toxic Effects: Very Toxic Material (> 0.1%)
E : Corrosive Material at (>1%)

Signal Word: Danger!

Hazard Statements

H315	Causes skin irritation
H320	Causes eye irritation

Precautionary Statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash...thoroughly after handling

2. COMPOSITION, INFORMATION ON INGREDIENTS (Not Intended As Specifications)

Description	CAS Number	Concentration
Phosphoric Acid	7664-38-2	12 - 16
Isopropyl Alcohol	67-63-0	3 - 4
Hydrogen Fluoride	7665-39-3	1 - 2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

3. HAZARDS IDENTIFICATION

Overview Material is corrosive and will burn eyes. Can cause skin defatting and irritation with prolonged exposure. Inhalation may cause headache, nausea, dizziness. Prolonged exposure may lead to dermatitis. Ingestion may lead to vomiting. Severe overexposures may lead to coma and possible death due to respiratory failure.

Inhalation Inhalation of product may cause headache, nausea, and dizziness.

Skin Contact Corrosive to the skin. Causes burns.

Skin Absorption None noted.

Eye Contact Corrosive to the eyes. Causes burns.

Ingestion May be harmful if swallowed. Corrosive to the digestive tract. Causes burns.

Other Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

4. FIRST-AID MEASURES

General If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a **POISON CONTROL CENTER, EMERGENCY ROOM, OR PHYSICIAN** immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Inhalation Remove to fresh air and restore breathing if necessary. Seek medical attention.

Skin Contact Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Apply generous quantities of fresh calcium gluconate gel to all areas. Get immediate medical attention

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention

Ingestion If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
Apply generous quantities of fresh calcium gluconate gel to all areas. Get immediate medical attention

Physicians Note: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. FIRE-FIGHTING MEASURES

LEL: Not determine	UEL: Not determined	Auto Ignition: Not determine	Boiling Point 210°F (98.9°C)

Unusual Fire or Exposion Hazards	Decomposition products may include the following materials: • carbon oxides • phosphorus oxides • halogenated compounds
Sensitivity to Mechanical Impact	Not expected to be sensitive to mechanical impact.
Rate of Burning	Not determined.
Explosive Power	Not determined.
Sensitivity to Static Charge	Not applicable.
Extinguishing Media	Use an extinguishing agent suitable for the surrounding fire.
Instructions to Fire Fighters	No special instructions.
Fire Fighting Protective Equipmen	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Enviromental Precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Large Spill Handling
- Stop leak without risking safety.
- Move containers from spill area.
- Approach release from upwind.
- Prevent entry into sewers, water ways, basements, or confined areas.
- Wash spillages into an effluent treatment plant. If effluent treatment plant is not available then contain

and collect spillage with non-combustible, absorbent material (i.e. sand, earth, vermiculite, or diatomaceous earth) and place in container for disposal according to local regulations (see Section 13).

- Dispose of via a licensed waste disposal contractor.
- Contaminated absorbent material may pose the same hazard as the spilled product.

Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Small Spill Handling — Stop leak if without risking personal or enivormental well being. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

Handling — Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage — Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Phosphoric Acid

ACGIH			OSHA			NIOSH		
TWA	STEL	CEILING	TWA	STEL	CEILING	TWA	STEL	CEILING
1 mg/m3	3 mg/m3		1 mg/m3	Not established		1 mg/m3	3 mg/m3	

Isopropyl Alcohol

ACGIH			OSHA			NIOSH		
TWA	STEL	CEILING	TWA	STEL	CEILING	TWA	STEL	CEILING
400 ppm	500 ppm		400 ppm (980 mg/m3)	500 ppm (1230 mg/m3)		400 ppm (980 mg/m3) 10	500 ppm (1225 mg/m3)	

Hydrogen Fluoride

ACGIH			OSHA			NIOSH		
TWA	STEL	CEILING	TWA	STEL	CEILING	TWA	STEL	CEILING
3 ppm			3 ppm	6 ppm				

Personal Protective Equipment (PPE)

General PPE — Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory — If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: Half-face filter respirator

Hands — Any specific glove information provided is based on published literature and glove manufacturer data. Work conditions can greatly affect glove durability; inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: NEOPRENE and NITRILE
If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eyes	Chemical splash goggles or face shield should be used. Safety Glasses do not offer enough protection from spray and splashing product.
Skin and Body	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Hygiene	Wash hands, forearms, and face thoroughly after handling chemical products prior to eating, smoking, using the lavatory, and at the end of the working periods. Appropriate procedures should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. – Physical and Chemical Properties

Physical State: Liquid		Density: 9.25 lbs/gal
Appearance: Clear		pH: 2.1
Color: Colorless		Viscosity: 1000 - 2000 cps
Odor: Slight acidic		Solubility in Water: Complete
Boiling Point: 210°F (98.9°C)	LEL: Not determined	Vapor Density: Not determined
Freezing Point: Not determined	UEL: Not determined	Vapor Pressure: Not determined
Melting Point: Not determined	Auto Ignition: Not determined	Evaporation Rate: Not determined
FlashPoint:		VOC: 39.54 g/L

10. Stability and Reactivity

Stability	Stable
Conditions to Avoid	None known
Materials to Avoid	None known
Decomposition	None known
Polymerization	None known

11. TOXICOLOGICAL INFORMATION

Isopropyl Alcohol

Test Method	Dosage/Concentration
LD50 (oral, rabbit)	6410 mg/kg
LD50 (oral, rat)	5045 mg/kg
LD50 (oral, mouse)	3600 mg/kg

Phosphoric Acid

Test Method	Dosage/Concentration
LC50 (inhalation, rat)	25.5 mg/m³
LD50 (oral, rat)	1.25 g/kg

Xanthan Gum

Test Method	Dosage/Concentration

LD50 (oral, rat)	>5,000 mg/kg

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environment agency for specific rules). Do not dump in sewers, any body of water, or on the ground unless it complies with local, state, and federal laws and regulation.

Empty containers retain product residue and can be dangerous. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. Do not dispose of package until thoroughly washed and rinsed out.

14. TRANSPORT INFORMATION

In accordance with ICAO/IATA/DOT/TDG

UN Number:	UN1760
UN Proper Shipping Name	CORROSIVE LIQUID, N.O.S., (PHOSPHORIC AND HYDROFLUORIC ACIDS)
UN Class:	8
Package Group (DOT)	II

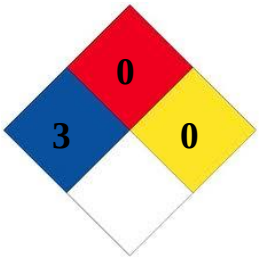
15. REGULATORY INFORMATION

All regulatory information is stated as provided by MSDS from manufacturer/distributor.

Isopropyl Alcohol

None determined by manufacturer.

16. OTHER INFORMATION



This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.