

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Mineral-XX
Product Code: 10074
Product Use: Acid Cleaner – Removes Heavy Mineral Deposits From Apples
Product: For Agriculture Use Only
Restrictions:
Manufacturer: Pace International, LLC
Address: 5661 Branch Road, Wapato, WA 98951
Phone Number: 800-936-6750 (Monday-Friday, 7:00 a.m. – 4:00 p.m.)
Medical Emergency Phone Number: 888-271-4649 (PROPHARMA/PROSAR)
Transportation Emergency Phone Number: 800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910 (2012 OSHA Hazard Communication Standard)
 This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification:

Physical, CORROSIVE Category 1
 Skin irritation, Category 1
 Eye irritation, Category 1

Hazard Symbols:



Signal Word:

DANGER

Hazard Statements:

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.

Other Hazards:

Hazard(s) not otherwise classified (HNOC):

Precautionary Statements:

Prevention Statements:

P234 Keep only in original container.
 P260 Do not breathe mist, vapor, or spray.
 P264 Wash hands thoroughly after handling.
 P280 Wear impermeable clothing, safety goggles or face shield and chemical resistant gloves.
 P390 Absorb spillage to prevent material damage.

Response Statements:

P301/330/331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.
 P303/361/353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P363 Wash contaminated clothing before reuse.
 P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P310 Immediately call a POISON CENTER or doctor for medical advice.
 P321 Specific treatments see Section 4 First Aid Measures.
 P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER or doctor for medical advice.
Storage Statements:
 P406 Store in corrosive resistant container with a resistant inner liner.
 P405 Store locked up.

Disposal Statements:

P501 Dispose of contents/container should be made in accordance with applicable regional, national and local laws and regulations.
 None known.
 None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>Concentration (w/w %)</u>
Phosphoric Acid	7664-38-2	26 %
Other ingredients*	Balance	74 %

*Other Ingredients not identified are trade secrets and non-hazardous.



4. FIRST AID MEASURES

General Advice:	Have the product container, label or Safety Data Sheet with you when calling a poison control center or physician, or going for treatment. You may also contact PROPHARMA (PROSAR) 1-888-271-4649 for emergency medical treatment information.
If on Skin:	Take off immediately all contaminated clothing. Wash skin with plenty of soap and water. Wash contaminated clothing before reuse.
If in Eyes:	Hold eye open and rinse cautiously with water for 15 – 20 minutes. Remove contact lenses, after the first 5 minutes if present and easy to do, then continue rinsing eye. Immediately call a POISON CENTER/doctor for medical advice.
If Swallowed:	Rinse mouth. Call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
If Inhaled:	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor for medical advice. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible.
Most important Symptoms / effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of any immediate medical attention and special treatment needed:	Treat patient symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Not flammable. Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool.
Unsuitable Extinguishing Media:	None known.
Special Hazards Arising from the Chemical:	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters:	Firefighters should wear full protective clothing including self-contained breathing apparatus. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
Fire-fighting equipment/instructions:	Move containers from fire area if you can do so without risk.
Specific methods:	Use standard firefighting procedures and consider the hazards of other involved materials.
Hazardous combustion products	May include and are not limited to: Oxides of phosphorus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Never return spills to original containers for re-use. Clean surface thoroughly to remove residual contamination. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.
Environmental precautions	DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters.



7. HANDLING & STORAGE

Precautions for safe handling	Use good industrial hygiene practices in handling this material. DO NOT get in eyes, on skin or clothing. Use only with adequate ventilation. Do not breathe mist, vapor, or spray. Keep container upright to prevent leakage. Wear appropriate personal protective equipment (see Section 8 of the SDS). Wash thoroughly after handling. Eating, drinking and smoking in work areas is prohibited. Absorb spillage to prevent material damage.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store in a cool, dry, well-ventilated area. Store in a corrosion resistant container with a resistant inner liner. Store away from incompatible materials (see Section 10 of the SDS). Do not contaminate water, food, or feed by storage or disposal. Keep out of reach of children.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Phosphoric Acid CAS# 7664-38-2	PEL	1 mg/m3
US. ACGIH Threshold Limit Values		
Phosphoric Acid CAS# 7664-38-2	STEL	3 mg/m3
	TWA	1 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Phosphoric Acid CAS# 7664-38-2	STEL	3 mg/m3
	TWA	1 mg/m3

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	See above
Appropriate 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. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear chemical goggles or face shield. Eye fountain and washing facilities should be available.
Skin protection	
Hand protection	Impervious gloves. Confirm with reputable supplier first.
Other	Use of an impervious apron is recommended.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. A NIOSH-approved respirator with acid gas filters may be used in misty environments without proper ventilation.
Thermal hazards	Not applicable.
General hygiene considerations	Use good industrial hygiene practices in handling this material. When using do not eat, drink, or smoke. Wash thoroughly after handling.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical state:	Liquid	Upper/lower flammability or explosive limits:	Not available
Appearance:	Colorless – Clear	Vapor pressure:	Not available
Odor:	Odorless	Vapor density: (air =1)	Not available
Odor threshold:	Not available	Specific Gravity: (H₂O = 1)	1.16
pH:	.26	Solubility:	Miscible with water
Melting/Freezing point:	Not available	Partition coefficient (n-octanol-water):	Not available
Pour Point:	Not available	Auto-ignition temperature:	Not available
Initial boiling point and boiling range:	212°F (100°C)	Decomposition temperature:	Not available
Flash point:	> 200°F (93°C)	Viscosity:	Not available
Evaporation rate:	Not available	Explosive Properties:	Not explosive
Flammability (solid, gas):	Not applicable	Oxidizing Properties:	Not oxidizing.



10. STABILITY & REACTIVITY

Reactivity hazards:	Reacts violently with alkaline material. This product may react with reducing agents. Reacts with soft metals producing flammable hydrogen gas. This product may react with strong oxidizing agents.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid:	Do not mix with other chemicals.
Incompatible materials:	Chlorine reacts violently in the presence of acids. Do not add chlorine to submersion tanks containing this product. Bases. Oxidizers. Reducing agents. Metals.
Hazardous decomposition products:	May include and are not limited to: Oxides of phosphorus.

11. TOXICOLOGICAL INFORMATION

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.	
Information on likely routes of exposure		
Ingestion	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.	
Inhalation	May cause respiratory tract irritation or chemical burns.	
Skin corrosion / irritation:	May cause chemical burns. Harmful contact may not cause immediate pain.	
Eye damage / irritation:	Causes serious eye damage.	
Symptoms related to the physical, chemical and toxicological characteristics	Contact with this material may cause burns to the skin, eyes and mucous membranes.	
Information on toxicological effects		
Acute toxicity	May cause severe skin burns and eye damage.	
Components	Species	Test Results
Phosphoric acid (CAS 7664-38-2)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2740 mg/kg
<i>Inhalation</i>		
LC50	Guinea pig, Mouse, Rabbit, Rat	61 mg/m ³ , 1 Hours
<i>Oral</i>		
LD50	Rat	1530 mg/kg 1.7 ml/100g
Skin corrosion/irritation:	Causes severe skin burns and eye damage.	
Serious eye damage/eye Irritation:	Causes serious eye damage.	
Respiratory sensitization:	Not a respiratory sensitizer.	
Skin sensitization:	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity:	Non-hazardous by WHMIS/OSHA criteria.	
Carcinogenicity:	Non-hazardous by WHMIS/OSHA criteria.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.	
Reproductive toxicity:	This product is not expected to cause reproductive or developmental effects. Non-hazardous by WHMIS/OSHA criteria.	
Teratogenicity:	Non-hazardous by WHMIS/OSHA criteria.	
Specific target organ toxicity - single exposure:	Not classified.	
Specific target organ toxicity - repeated exposure:	Not classified.	
Aspiration hazard:	Not classified.	
Chronic effects:	Prolonged inhalation may be harmful.	

12. ECOLOGICAL INFORMATION



Ecotoxicity	See below		
Ecotoxicological data			
Components	Species	Test Results	
Phosphoric acid (CAS 7664-38-2)			
Aquatic			
<i>Acute</i>			
Crustacea	LC50	Water flea (<i>Daphnia magna</i>)	4.6 mg/L, 12 hr
Fish	LC50	Mosquitofish (<i>Gambusia affinis affinis</i>)	3 - 3.5 mg/L, 96 hr
Persistence/ degradability: No data is available on the degradability of this product.			
Bioaccumulative potential			
Mobility in soil:		No data available.	
Mobility in general:		Not available.	
Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.			

13. DISPOSAL CONSIDERATIONS

Disposal instructions:	Recover or recycle if possible. Do not discharge into sewers, lakes, streams, or other bodies of water. Disposal should be made in accordance with applicable regional, national and local laws and regulations. Consult appropriate regulatory officials for information on disposal, keeping in mind that local regulations may be more stringent than regional or national requirements.
Hazardous waste code	D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel] The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

	DOT
UN number:	UN 1805
Proper shipping name:	Corrosive liquid, n.o.s. (Phosphoric acid solution)
Hazard class(es):	8
Packing group:	III
Marine Pollutant:	IMDG Regulated Marine Pollutant.
Special provisions:	A7, IB3, N34, T4, TP1
Packaging exceptions:	154
Packaging non bulk:	203
Packaging bulk:	241

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Phosphoric acid (CAS 7664-38-2) Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Phosphoric acid (CAS 7664-38-2) Not regulated.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Phosphoric acid (CAS 7664-38-2) Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	Phosphoric acid (CAS 7664-38-2) Listed.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Phosphoric acid (CAS 7664-38-2) Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	Hazard Categories Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	No



SARA 313 (TRI reporting)	Not regulated.
US STATE REGULATIONS	
US - California Hazardous Substances (Director's):	
Phosphoric acid (CAS 7664-38-2)	Listed.
US - Illinois Chemical Safety Act:	
Phosphoric acid (CAS 7664-38-2)	Listed.
US - Louisiana Spill Reporting: Listed substance	
Phosphoric acid (CAS 7664-38-2)	Listed.
US - Minnesota Haz Subs: Listed substance	
Phosphoric acid (CAS 7664-38-2)	Listed.
US - New Jersey RTK - Substances: Listed substance	
Phosphoric acid (CAS 7664-38-2)	Listed.
US - Texas Effects Screening Levels: Listed substance	
Phosphoric acid (CAS 7664-38-2)	Listed.
US. Massachusetts RTK - Substance List	
Phosphoric acid (CAS 7664-38-2)	Listed.
US. Pennsylvania RTK - Hazardous Substances	
Phosphoric acid (CAS 7664-38-2)	Listed.
US. Rhode Island RTK	
Phosphoric acid (CAS 7664-38-2)	Listed.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Inventory status

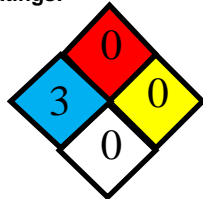
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

HMIS Ratings: Health – 3 Flammability – 0 Reactivity – 0

NFPA Ratings:



The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, Pace International, LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, neither Pace International, LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. It is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Pace International, LLC to confirm that you have the most current product label and SDS.

This Safety Data Sheet (SDS) may provide more information than the product label but does not replace or modify the product labeling (attached to and accompanying the product container). The product SDS and the product label both provide consistent and important health, safety, and environmental information as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). This requirement covers employers, employees, emergency responders, users and others handling the product. All necessary hazard classification and appropriate precautionary, use, storage, and disposal information is set forth on the labeling and the SDS.

SDS preparation date: June 16, 2017 **Replaces M SDS dated:** May 12, 2017
Version No. 3
Changes since last revision: Section 4, First Aid Measures, 5 Fire Fighting Measures, 12 Ecological Info.

