



Aqua Chemical Supply, Inc.

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1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier Pro Series Phos Remove
 Other means of identification Not available
 Recommended use Phosphate remover
 Recommended restrictions None known.
 Manufacturer/Supplier/Distributor:
 Natural Chemistry L.P.
 40 Richards Ave.
 Norwalk, CT 06854 US
 Emergency telephone number: For emergency assistance involving chemicals call
 CHEMTREC day or night at: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Physical hazards Not classified.
 Health hazards Acute toxicity, oral Category 4
 Skin corrosion/irritation Category 1
 Serious eye damage/eye irritation Category 1
 Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
 Environmental hazards Not classified.
 OSHA defined hazards Not classified.
 Label elements



Signal word Danger
 Hazard statement Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
 Precautionary statement
 Prevention Do not breathe mist or vapor. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.
 Response 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/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Rinse mouth. Do NOT induce vomiting. If swallowed: Call a poison center/doctor if you feel unwell.
 Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.
 Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
 Hazard(s) not otherwise classified (HNOC) None known.
 Supplemental information Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixture	Chemical name	Common name and synonyms	CAS number	%
	Lanthanum Chloride (IaCl ₃), Hydrate		20211-76-1	11.05
	Zinc chloride		7646-85-7	9.38
	Aluminum chlorhydrate		12042-91-0	8.25

Composition comments: All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. FIRST AID MEASURES

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Wash skin with soap and water. Get medical attention if irritation develops and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media Water spray. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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.

General fire hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Hydrogen chloride. Oxides of sulfur. Oxides of aluminum.

Explosion data

Sensitivity to mechanical impact Not available

Sensitivity to static discharge Not available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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 This product is miscible in water. Stop the flow of material, if this is without risk.

Large Spills: 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. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Precautions for safe handling Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.

Conditions for safe storage, including any incompatibilities Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Components	Type	Value	Form
Zinc chloride (CAS 7646-85-7)	PEL	1 mg/m ³	Fume.
US. ACGIH Threshold Limit Values			
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	1 mg/m ³	Respirable fraction.
Zinc chloride (CAS 7646-85-7)	STEL	2 mg/m ³	Fume.
	TWA	1 mg/m ³	Fume.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Aluminum chlorhydrate (CAS 12042-91-0)	TWA	2 mg/m ³	
Zinc chloride (CAS 7646-85-7)	STEL	2 mg/m ³	Fume.
	TWA	1 mg/m ³	Fume.

Biological limit values No biological exposure limits noted for the ingredient(s).

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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Not applicable.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES


Appearance	Clear
Physical state	Liquid.
Form	Liquid.
Color	Colorless
Odor	Not available.
Odor threshold	Not available.
pH	2 - 4
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available
Pour point	Not available.
Specific gravity	1.1 – 1.3
Partition coefficient (n-octanol/water)	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available
Flammability limit – upper (%)	Not available
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available
Vapor density	Not available
Relative density	8 - 11 lb/gal
Solubility(ies)	Complete
Auto-ignition temperature	Not available
Decomposition temperature	Not available.
Viscosity	Not available

10. STABILITY AND REACTIVITY

Reactivity	Reacts vigorously with alkaline material.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Caustics. Reducing agents.
Hazardous decomposition products	Hydrogen chloride. Oxides of sulfur. Oxides of aluminum.

11. TOXICOLOGICAL INFORMATION

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.	
Information on likely routes of exposure		
Ingestion	Causes digestive tract burns. Harmful if swallowed.	
Inhalation	Prolonged inhalation may be harmful. May cause irritation to the respiratory system.	
Skin contact	Causes severe skin burns.	
Eye contact	Causes serious eye damage.	
Symptoms related to the physical, chemical and toxicological characteristics		
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.		
Information on toxicological effects		
Acute toxicity	Harmful if swallowed. May cause respiratory irritation.	
Components	Species	Test Results
Aluminum chlorhydrate (CAS 12042-91-0)		
Acute		
Dermal LD50	Rabbit	> 2000 mg/kg
Inhalation LC50	Not available	
Oral LD50	Rat	1987 mg/kg
Lanthanum Chloride (lacl3), Hydrate (CAS 20211-76-1)		
Acute		
Dermal LD50	Not available	
Inhalation LC50	Not available	
Oral LD50	Not available	
Zinc chloride (CAS 7646-85-7)		
Acute		
Dermal LD50	Not available	
Inhalation LC50	Not available	
Oral LD50	Guinea pig	200 mg/kg
	Mouse	350 mg/kg
	Rat	350 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Exposure minutes	Not available.	
Erythema value	Not available.	
Oedema value	Not available.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Corneal opacity value	Not available.	
Iris lesion value	Not available.	
Conjunctival reddening value	Not available.	
Conjunctival oedema value	Not available.	
Recover days	Not available.	
Respiratory or skin sensitization		
Respiratory sensitization	Not classified.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
ACGIH Carcinogens		
Aluminum chlorhydrate (CAS 12042-91-0)	A4	Not classifiable as a human carcinogen.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Teratogenicity	Not classified.	
Specific target organ toxicity - single exposure	Respiratory tract irritation	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	
Chronic effects	Prolonged inhalation may be harmful.	

Further information	Not available.	
Name of Toxicologically Synergistic Products	Not available	
12. ECOLOGICAL INFORMATION		
Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. See below.	
Components	Species	Test Results
Zinc chloride (CAS 7646-85-7)		
Crustacea EC50	American or virginia oyster (<i>Crassostrea virginica</i>)	0.151 - 0.278 mg/l, 48 hours
Fish LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>)	0.101 - 0.197 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential	No data available.	
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 CONSIDERATION		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.	
Dispose of contents/container in accordance with local/regional/national/international regulations.		
Local disposal regulations	Dispose in accordance with all applicable regulations.	
Hazardous waste code	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 Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.	
14. TRANSPORT INFORMATION		
U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.	
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.	
15. REGULATORY INFORMATION		
Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.	
Canada CEPA Schedule I: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
Canada Priority Substances List (Second List): Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
Canada WHMIS Ingredient Disclosure: Threshold limits		
Aluminum chlorhydrate (CAS 12042-91-0)	1 %	
Zinc chloride (CAS 7646-85-7)	1 %	
WHMIS status	Controlled	
WHMIS classification	Class D - Division 2B	
WHMIS labeling		
		
US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.	
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration		
Zinc chloride (CAS 7646-85-7)	1.0 % N982	
US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed. N982	
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.	
US CWA Section 311 Hazardous Substances: Listed substance		

Zinc chloride (CAS 7646-85-7)	Listed.	
US CWA Section 307(a)(1) Toxic Pollutants: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
CERCLA Hazardous Substance List (40 CFR 302.4)		Listed.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)		Not regulated.
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List		Not regulated.
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)		
Chemical name	CAS number	% by wt.
Zinc chloride	7646-85-7	9.38
Other federal regulations		
Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	Hazardous substance	
Safe Drinking Water Act (SDWA)	Not regulated	
Food and Drug Administration (FDA)	Not regulated.	
US - California Hazardous Substances (Director's): Listed substance		
Aluminum chlorhydrate (CAS 12042-91-0)	Listed.	Zinc chloride (CAS 7646-85-7)
Listed.		
US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance		
Not listed.		
US - Illinois Chemical Safety Act: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
US - Louisiana Spill Reporting: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
US - Michigan Critical Materials Register: Parameter number		
Zinc chloride (CAS 7646-85-7)	07440-66-6	Listed.
US - Minnesota Haz Subs: Listed substance		
Aluminum chlorhydrate (CAS 12042-91-0)	Listed.	Zinc chloride (CAS 7646-85-7)
Listed.		
US - New Jersey RTK - Substances: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
US - New York Release Reporting: Hazardous Substances: Listed substance		
Zinc chloride (CAS 7646-85-7)	Listed.	
US - Texas Effects Screening Levels: Listed substance		
Aluminum chlorhydrate (CAS 12042-91-0)	Listed.	Zinc chloride (CAS 7646-85-7)
Listed.		
US. Massachusetts RTK - Substance List		
Zinc chloride (CAS 7646-85-7)	Listed.	
US. Pennsylvania RTK - Hazardous Substances		
Aluminum chlorhydrate (CAS 12042-91-0)	Listed.	Zinc chloride (CAS 7646-85-7)
Listed.		
US. Rhode Island RTK		
Zinc chloride (CAS 7646-85-7)	Listed.	
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

Notice

Aqua Chemical Supply, Inc. expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Aqua Chemical Supply, Inc. sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Aqua Chemical Supply, Inc. makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Aqua Chemical Supply, Inc.'s control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

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