



SAFETY DATA SHEET

1. Product and Company Identification

Product Name	AQ-725 AQUAPHASE DE-LIMING SOLUTION
Product Number	515
Product Type	Mixture
Product Use	Descaling of mineral deposits on hard surfaces
Manufacturer/Supplier	National Purity, LLC. 6840 Shingle Creek Parkway, Suite #23 Brooklyn Center, MN 55430
Company Contact	612-672-0022
Emergency Telephone Number	1-800-255-3924

2. Hazards Identification

GHS Classification in accordance with 29 CFR 1910 OSHA HCS

Acute toxicity, Oral (Category 1) H300,
Acute toxicity, Inhalation (Category 4) H332
Skin corrosion/irritation, (Category 1) H314
Eye irritation, (Category 1) H318
Specific target organ toxicity (Category 1) H370
Chronic aquatic toxicity, (Category 1) H410

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard Statements

H300 Fatal if swallowed. May cause corrosive damage to mouth, throat, or stomach.
H314 Causes severe skin burns and eye damage. Corrosive to the eyes leading to blindness
H332 Harmful if inhaled.
H370 Inhalation can cause irritation or corrosion to upper respiratory tract, including nose, mouth, and throat. Ingestion can cause corrosive burns to mouth, throat, and stomach.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P260 Do not breathe fumes, mists, vapors or spray.
P284 In case of inadequate ventilation, use NIOSH approved respirator.
P273 Avoid release to the environment.

Response

P303+P361+P353+P363 IF ON SKIN (or hair), immediately take off all contaminated clothing and rinse skin with copious amounts of water. Shower if facilities are readily available.
Wash all contaminated clothing before reuse.
P310 Immediately call a POISON CENTER/doctor and seek medical attention.



P301+P312+P330	IF SWALLOWED, immediately call a POISON CENTER/doctor. DO NOT INDUCE VOMITING. Rinse mouth with water.
P305+P351+P337+P310	IF IN EYES, rinse cautiously for several minutes. Remove contact lenses if present. Continue rinsing. Immediately call a POISON CENTER/doctor and get medical attention.
P304+P340+P312	IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if feeling unwell.
P308+P311+P321	If exposed or concerned, call a POISON CENTER/doctor. See supplemental First Aid instructions in section 4.
Storage/Disposal	
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/federal regulations.

3. Composition/Information on Ingredients

The criteria for listing components in this section are: Ingredients that meet the criteria for carcinogenic, toxic to reproduction, or specific target organ toxicity and components otherwise considered hazardous according to OSHA which exceed the cut off limits for SDS specified by the criteria for mixtures are listed. Non hazardous components are not listed. This is not a composition disclosure. Exact percentages are considered proprietary and a trade secret.

Hazardous Components	CAS#	Classification	%
Phosphoric acid	7664-38-2	H300, H314, H318, H410	30-40%
Hydroxyacetic acid	79-14-1	H302, H314, H332	0-3%

4. First Aid Measures

Description of First Aid Procedures	
General Advise	Consult a physician. Show this SDS to the doctor.
In Case of Eye Contact	Flush with cool running water for 15 minutes. Remove contact lenses if present. Get immediate medical attention.
In Case of Skin Contact	Wash with soap and water and rinse thoroughly with cool running water. Remove contaminated clothing. Get immediate medical attention.
If Ingested	Rinse mouth with water. Do not induce vomiting. Obtain immediate medical attention. Never give anything by mouth to an unconscious person.
If Inhaled	Move person to fresh air. Consult a physician if feeling unwell.
Notes to Physician	Symptoms may be delayed.
General advice	Seek medical attention if feeling unwell. Show the SDS to the physician in attendance.

5. Fire-fighting Measures

Flammable properties	Not flammable.
Extinguishing media	Use dry chemical, foam, carbon dioxide or water fog.
Protection of firefighters	Firefighters should wear protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and not limited to oxides of phosphorus, and carbon.
Unusual Fire, Explosion hazards	Containers may melt or rupture from heat of fire. May form combustible mixtures with air when heated.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personal away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled containers unless wearing protective clothing.
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**Methods for containment
Methods for cleaning up**

Stop leak if you can do so without risk. Prevent entry into waterways, sewers. Before attempting clean up, refer to hazard data given above. Large spills, dike area to prevent from spreading. Neutralize with alkaline material such as soda ash or lime. Absorb with non reactive absorbent and place in suitable, covered, and labeled container. Rinse area with water. Never return spill to original container.

Environmental precautions

Avoid spills. Keep out of waterways.

7. Handling and Storage

Precautions for Safe Handling

Use good industrial hygiene practices when handling this material. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse.

Conditions for Safe Storage

Keep container closed when not in use. Store in cool well ventilated area. Keep away from heat. Store locked up.

8. Exposure Controls and Personal Protection

Exposure Limits

Ingredients	CAS#	OSHA PEL	ACGIH TLV
Phosphoric acid	7664-38-2	Not available	Not available
Hydroxyacetic acid	79-14-1	Not available	Not available

Engineering controls

Local exhaust ventilation is recommended. Ventilation system should be designed according to approved engineering standards.

Personal protective equipment

Eye/Face protection

Wear chemical safety goggles or full face shield if splash conditions exist. Have suitable eye wash water available. Shower near by.

Hand protection

Wear impermeable gloves to prevent contact with skin.

Skin and body

Wear impervious protective clothing including boots, gloves, and face shield where splashing is possible. Have quick drench/shower facilities in work area.

Respiratory protection

Use a NIOSH approved respirator when exposure guidelines are exceeded.

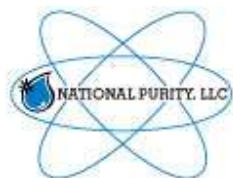
General hygiene considerations

Handle in accordance with good industrial hygiene practices. Do not eat or drink when using product. Wash hands well before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance/form	Clear liquid
Color	Colorless
Odor	Odorless
Odor threshold	Not established
pH	1.7 (1% solution)
Melting/freezing point	Not established
Initial Boiling point	>212° F. (100° C.)
Flash point	Not established
Evaporation rate	Not established
Flammability	Not flammable
Upper/lower flammability or	Not applicable
Explosive limits	Not applicable
Vapor pressure	Not established
Vapor density	Not established
Specific gravity/density	Not established
Solubility in water	Complete



VOC < 0.1%
% Volatile Approx. 60%

Other Safety Information

10. Stability and Reactivity

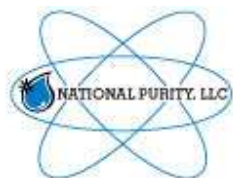
Reactivity	
Chemical Stability	Stable under normal conditions of storage, handling and use.
Hazardous reactions	Keep separate from organic materials. Avoid contact with alkaline materials and metals.
Conditions to avoid	High temperatures. Do not mix with other chemicals.
Incompatible materials	Strong alkalis, strong oxidizing agents, and reactive metals, such as aluminum, copper, brass,, bronze and mild steel.
Hazardous decomposition products	May include but not limited to oxides of carbon, phosphorous and phosphine from thermal decomposition. Hydrogen gas from reaction with metals.
Hazardous polymerization	Will not occur.

11. Toxicological Information

Ingredients	LC50
Phosphoric acid	1.689 mg/m ³ P ₂ O ₅
Hydroxyacetic acid	7.7 mg/L
Ingredients	LD50
Phosphoric acid	1,530 mg/kg (Oral-rat), > 1,260-3,160 mg/kg (Dermal-rabbit)
Hydroxyacetic acid	4240 mg/kg (oral-rat)
Eye	Causes severe eye damage. Corrosive to eyes leading to blindness
Skin	May cause severe skin burns.
Ingestion	Fatal if swallowed. May cause corrosive damage to mouth, throat and stomach.
Inhalation	Fatal if inhaled. Can cause pulmonary edema and chemical pneumonitis.
Sensitization	No data available.
Chronic effects of short and long Term exposure	Prolonged exposure to skin may cause drying, defatting and irritation and aggravate existing skin problems
Carcinogenicity	Does not contain ingredients considered carcinogenic by NTP, IARC, or OSHA.
Mutagenicity	No data available
Reproductive effects	No data available
Teratogenicity	No data available.

12. Ecological Information

Eco-toxicity	Ecological effects for this product have not been analyzed. However, if spilled this products ingredients are toxic to aquatic life and may have long lasting effects. EPA Ecological Toxicity rating: High.
Phosphoric acid	
Environmental effects	Phosphoric acid dissolves some soil materials (carbonates),
Aquatic toxicity	
Phosphoric acid	Dangerous to aquatic plants at high concentrations.
Persistence and Degradability	Under anaerobic conditions, microorganisms may degrade phosphoric acid to phosphine.
Bioaccumulation/accumulation	
Phosphoric acid	Inorganic phosphates have the potential to increase the growth of algae, whose eventual death will reduce the available oxygen for aquatic life.



Partition coefficient	Not Available
Mobility in environmental media	Not Available
Chemical fate information	Not Available
Other adverse effects	Not Available

13. Disposal Considerations

Waste codes	Not Available
Disposal instructions	Dispose in accordance with local, state, and federal regulations.
Wastes from residues/unused product	Containerize. Rinse area with water. Keep out of storm sewer/waterways.
Contaminated packaging	Dispose of container in accordance with federal, state, and local requirements.

14. Transport Information

Basic shipping requirements:	
Proper shipping name:	Corrosive liquids, acidic, inorganic, n.o.s. (contains phosphoric acid)
Hazard class	8
UN number	3264
Packing group	III
Special provisions	
Packaging exceptions	49CFR173.154 limited quantities

15. Regulatory Information

U.S federal regulations	This product has been classified in accordance with the Occupational Safety and Health Administration hazard criteria and the SDS contains all of the information required by OSHA. HCS 2012	
TSCA	All ingredients are listed on the Toxic Substances Control Act.	
CERCLA Super Fund 40CFR117.302	Product contains a material with a Reportable Quantity (RQ)	
Phosphoric acid	RQ = 5000 Lbs.	
SARA Title III Section 311&312	Immediate (Acute) Health Hazard Phosphoric acid	
SARA Title III Section 313	No ingredients are subject to Section 313 Reporting Requirements. Sulfuric acid which may be present at levels < 2% is reportable.	
States Right to Know	Reportable chemicals: Sulfuric acid which may be present at trace amounts is reportable.	
Warning	This product contains a chemical known to the state of California to cause cancer, birth defects or reproductive effects: Sulfuric acid present at < 2%.	
Inventory Status	Inventory Name	On Inventory (Yes/No)*
Countries		
U.S.	CIL	Yes
Canada	DSL	Yes

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



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16. Other Information

HMIS RATING

HMIS Legend

Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	3
Flammability	0
Reactivity	0
Personal Protection	B

Disclaimer

To the best of our knowledge, the information included herein is accurate. However, neither the above named supplier nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the 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.

Issue date

May 9, 2015

Supersedes date

Previous issues

Reason for update

Conform to GHS OSHA HCS 2012

Expiration date

May 9, 2018