

NATIONAL PURITY, LLC. 6840 SHINGLE CREEK PKWY, STE 23 **BROOKLYN CENTER, MN 55430** (612) 672-0022

SAFETY DATA SHEET

1. Product and Company Identification

AO-725 AOUAPHASE DE-LIMING SOLUTION

Product Number Product Type Product Use Manufacturer/Supplier

515 Mixture Descaling of mineral deposits on hard surfaces 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 breath 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 of 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. |
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Product Name

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|---------------------|--|
| 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

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| Methods for containment | Stop leak if you can do so without risk. Prevent entry into waterways, sewers. |
| Methods for cleaning up | 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

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|--------------------------------|--|-----------------------------------|--------------------------------|
| 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 | | tilation is recommended. Ventilat | tion system should be designed |
| 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 ne | ar 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 | is possible. Have quick drench/s | hower facilities in work area. |
| Respiratory protection | Use a NIOSH appr | roved respirator when exposure g | uidelines 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

| or mation on basic physical and t | chemical properties |
|-----------------------------------|---------------------|
| Appearance/form | Clear liquid |
| Color | Colorless |
| Odor | Odorless |
| Odor threshold | Not established |
| рН | 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 % Volatile Other Safety Information < 0.1% Approx. 60%

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 Tovicological Information |

11. Toxicological Information

LC50

| Ingredients |
|--------------------|
| Phosphoric acid |
| Hydroxyacetic acid |

Ingredients Phosphoric acid

Hydroxyacetic acid

 $\frac{1.689 \text{ mg/m}^3 \text{ P}_2\text{O}_5}{7.7 \text{ mg/L}}$

LD50 1,530 mg/kg (Oral-rat), > 1,260-3,160 mg/kg (Dermal-rabbit) 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 | Prolonged exposure to skin may cause drying, defatting and irritation and |
| Term exposure | 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 Phosphoric acid | 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. | |
|---|--|--|
| Thosphorie dela | LIA Leological Toxicity family. Tilgii. | |
| Environmental effects Aquatic toxicity | Phosphoric acid dissolves some soil materials (carbonates), | |
| 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 Mobility in environmental media Chemical fate information Other adverse effects | Not Available Not Available Not Available Not Available |
|--|---|
| other unverse enects | |
| | 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 |
| | |
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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 40CFR117.302Product contains a material with a Reportable Quantity (RQ)Phosphoric acidRQ = 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 | | |
| Countries | Inventory Name | On Inventory (Yes/No)* |
| 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.



HMIS RATING HMIS Legend

| Severe | 4 |
|----------|---|
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

Disclaimer

Issue date Supersedes date Reason for update

16. Other Information

| Health | 3 |
|----------------------------|---|
| Flammability | 0 |
| Reactivity | 0 |
| Personal Protection | B |

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.

January 9, 2019 May 9, 2015 Conform to GHS OSHA HCS 2012