according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.08.2015

Phosphoric Acid, 75% v/v

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Phosphoric Acid, 75% v/v

Manufacturer/Supplier Article number: DU13000265

Recommended uses of the product and restrictions on use: Laboratory Chemicals

Manufacturer Details:

AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291

Supplier Details:

Dubois Chemicals Inc. 3630 East Kemper Rd, Cincinnati, OH 45241 (800) 438-2647

Emergency telephone number:

Emergency Phone No. (800) 255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:



Corrosive Skin corrosion, category 1B Corrosive to metals, category 1 Serious eye damage, category 1

Corrosive to Metals 1. Skin Corrosion 1B. Serious eye damage 1.

Signal word: Danger

Hazard statements:

May be corrosive to metals. Causes severe skin burns and eye damage.

Precautionary statements:

If medical advice is needed have product container or label at hand. Keep out of reach of children. Read label before use. Wear protective gloves/protective clothing/eye protection/face protection. Keep only in original container. Wash skin thoroughly after handling. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing. Absorb spillage to prevent material damage.

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Specific treatment (see supplemental first aid instructions on this label). Store locked up. Store in corrosive resistant stainless steel container with a resistant inner liner. Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

| Ingredients: | | | | |
|---------------|----------------------|---------------------------|--|--|
| CAS 7664-38-2 | Phosphoric Acid, ACS | <75 % | | |
| CAS 7732-18-5 | Deionized Water | >25 % | | |
| | | Percentages are by weight | | |

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Seek medical attention immediately. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:

Remove contaminated clothing and wash before reuse or discard. Wash affected area with soap and water. Rinse exposed skin with water for 20 minutes. Immediately seek medical attention.

After eye contact:

Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Immediately seek medical attention. Continue rinsing eyes during transport to the hospital.

After swallowing:

Seek medical attention immediately. Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. Spasm, inflammation and edema of the larynx. Burning sensation. Inflammation and edema of the bronchi, pneumonitis, pulmonary edema. 7664-38-2: Stomach - Irregularities - Based on Human Evidence. 7664-38-2: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Hydrogen gas is released in contact with most metals. Thermal decomposition can lead to release of irritating

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gases and vapors.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions): None

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Soak up with inert absorbent material. Refer to Section 8. Wear protective eyeware, gloves, and clothing. Always obey local regulations. If necessary use trained response staff or contractor.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wash hands after handling. Avoid contact with eyes, skin, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Do not eat, drink, smoke, or use personal products when handling chemical substances. Refer to Section 13.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly closed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection



Exering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

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|----------------------------|--|--|--|
| Respiratory protection: | Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment. | | |
| Protection of skin: | Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing. | | |
| Eye protection: | Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles and faceshield (8 - inch minimum) are appropriate eye protection. | | |
| General hygienic measures: | Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Before re-wearing, wash contaminated clothing. | | |

SECTION 9: Physical and chemical properties

| Appearance (physical state, color): | Clear, colorless liquid | Explosion limit lower: Explosion limit upper: | Not determined Not determined |
|-------------------------------------|-------------------------|--|--|
| Odor: | Odorless | Vapor pressure at 20°C: | Not determined |
| Odor threshold: | Not determined | Vapor density: | 3.4 |
| pH-value: | Not determined | Relative density: | Approx. 1 |
| Melting/Freezing point: | Approx. 0°C | Solubilities: | Soluble in water. |
| Boiling point/Boiling range: | Approx. 100°C | Partition coefficient (n- octanol/water): | Not determined |
| Flash point (closed cup): | Not determined | Auto/Self-ignition temperature: | Not determined |
| Evaporation rate: | Not determined | Decomposition temperature: | 300 °C |
| Flammability (solid, gaseous): | Not determined | Viscosity: | a. Kinematic: Not determined b. Dynamic: Not determined |
| Density at 20°C: | Not determined | | |

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid: None

Incompatible materials:

Metals, strong bases, amines, alcohols, aldehydes.

Hazardous decomposition products:

Oxides of phosphorus, reactions with certain metals may release explosive and flammable hydrogen gases.

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SECTION 11: Toxicological information

Acute Toxicity: No additional information. Chronic Toxicity: No additional information. Skin corrosion/irritation:

Skin corrosion/irritation Irritating to skin. 7664-38-2.

Serious eye damage/irritation:

Eyes - Rabbit Result: Corrosive to eyes 7664-38-2.

Respiratory or skin sensitization: No additional information. **Carcinogenicity**: No additional information.

Germ cell mutagenicity: No additional information. Reproductive Toxicity: No additional information. STOT-single and repeated exposure: No additional information. Additional toxicological information: No additional information.

SECTION 12: Ecological information

Ecotoxicity:

7664-38-2, Phosphoric acid has moderate acute and chronic toxicity to aquatic life in waters of low alkalinity.

Persistence and degradability:

Readily degradable in the environment.

Bioaccumulative potential:

The phosphorus element is an essential nutrient for flora and fauna.

Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Treat the solid residue as normal refuse. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Cover spill with soda ash or calcium carbonate. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage. Mix and add water to form slurry. Decant to drain.

SECTION 14: Transport information

US DOT

UN Number: ADR, ADN, DOT, IMDG, IATA

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Limited Quantity Exception:

None

Bulk: RQ (if applicable): None Proper shipping Name: Phosphoric Acid Solution. Hazard Class: 8 Packing Group: III. Marine Pollutant (if applicable): No additional information. Comments: None Non Bulk: RQ (if applicable): None Proper shipping Name: Phosphoric Acid Solution. Hazard Class: 8 Packing Group: III. Marine Pollutant (if applicable): No additional information. Comments: None





SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute,Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7664-38-2 Phosphoric acid 5000.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

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This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-0-0

HMIS: 3-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

- IMDG International Maritime Code for Dangerous Goods.
- PNEC. Predicted No-Effect Concentration (REACH).
- CFR Code of Federal Regulations (USA)
- SARA Superfund Amendments and Reauthorization Act (USA).
- RCRA. Resource Conservation and Recovery Act (USA).
- TSCA. Toxic Substances Control Act (USA).
- NPRI National Pollutant Release Inventory (Canada).
- DOT US Department of Transportation.
- IATA International Air Transport Association.
- GHS Globally Harmonized System of Classification and Labelling of Chemicals.
- ACGIH American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstracts Service (division of the American Chemical Society).
- NFPA National Fire Protection Association (USA).
- HMIS Hazardous Materials Identification System (USA).
- WHMIS Workplace Hazardous Materials Information System (Canada).
- DNEL Derived No-Effect Level (REACH).