

Safety Data Sheet

| Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER | |
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| Product name: | Phosphoric Acid 85% |
| Other Names: | Orthophosphoric acid |
| Chemical formula: | H ₃ PO ₄ |
| Recommended Use: | Industrial solvent, cleaner, degreaser. Plating chemicals. Food additive. Chemical intermediate. Fertilizer. |
| Company Identification: Address: | UCN CHEMICAL Limited Korkut Reis Mah Lale Cad 13/7 Cankaya Ankara |
| Customer Centre: | |
| Section 2: HAZARD IDENTIFICATION | |
| Emergency Overview: | Causes severe skin burns and eye damage. Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Do not breathe dust, fume, gas, mist, vapours and/or spray. Wear protective gloves, clothing and eye/face protection. Wash thoroughly after handling. |
| Potential Acute Effects | Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). Slightly hazardous in case of inhalation (lung sensitizer). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe Health |

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| | over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. |
| Routes of entry: | Skin, eyes and inhalation. |
| Target organs: | Blood, liver, skin, eyes and bone marrow. |
| Skin contact: | Substance is corrosive. May cause severe burns and ulceration. |
| Eye contact: | Contact causes eye irritation, may cause burns or blindness |
| Inhalation: | Inhalation can cause irritation or corrosive burns to the upper respiratory system, including nose, mouth, and throat. Lung irritation, pulmonary edema, and chemical pneumonitis can also occur. |
| Ingestion: | Ingestion causes irritation and can cause corrosive burns to mouth, throat and stomach resulting in hemorrhaging and permanent damage. Can be fatal if swallowed. |
| Chronic Exposure: | Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs. |
| Explanation of carcinogenicity: | This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens. |
| Medical conditions aggravated by exposure: | In persons with impaired pulmonary function, especially those with obstructive airway diseases, the breathing of phosphoric acid dust or mist might cause exacerbation of symptoms due to its irritant properties. Phosphoric acid mist or solutions may cause dermatitis |

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| Section 3: Composition Information | | |
| INGREDIENT | CAS No. | CONTENT |
| Phosphoric Acid | 7664-38-2 | 85-88 |
| Water | 7732-18-5 | 12-15 |
| Section 4: FIRST AID MEASURES | | |
| Inhalation: | Inhalation of mists can cause corrosive action on mucous membranes. Symptoms include burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache or nausea. Move casualty to fresh air and keep at rest. Get medical attention if symptoms persist. | |
| Ingestion: a | Do Not Induce Vomiting! Causes corrosive burns of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include burning, choking, nausea, vomiting and severe pain. Wash out mouth with water and give a glass of water or milk. Get medical attention immediately. | |
| Skin: | Symptoms include burning, itching, redness, inflammation and/or swelling of exposed tissues. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary. | |
| Eye: | Symptoms include eye burns, watering eyes. Rinse with plenty of water for a minimum of 15 minutes and seek medical attention immediately. | |
| Advice to Doctor: | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. | |
| Section 5: FIREFIGHTING MEASURES | | |
| Flash Point: | Not applicable | |

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| Combustion Products: | Non-combustible, substance itself does not burn but may decompose up on heating to produce corrosive and/or toxic fumes. |
| Extinguishing Media: | Product is not flammable. Use appropriate media for adjacent fire. Cool containers with water, keep away from common metals. |
| Protective Equipment: | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. |
| HAZCHEM Code: | 2R |
| Section 6: ACCIDENTAL RELEASE MEASURES | |
| Spills and Disposal: | <p>Small spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. If necessary: neutralize the residue with a dilute solution of sodium carbonate</p> <p>Large spill: Corrosive liquid. Poisonous liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Neutralize the residue with a dilute solution of sodium carbonate.</p> |
| Protective Clothing: | Put on appropriate personal protective equipment (see section 8). |
| Environmental: | Prevent entry into waterways, sewers, basements or confined areas. Runoff from fire control or dilution water may cause pollution. |
| Section 7: HANDLING AND STORAGE | |
| Handling: | Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product |

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| | residue and can be hazardous. Do not reuse container. |
| Storage: | Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |
| Other Information: | |
| Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION | |
| Exposure Limits: | 1 mg/m ³ |
| Protective Equipment: | Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots. |
| Engineering Controls: | Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location. |
| Hygiene Precautions: | Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Handle in accordance with good industrial hygiene and safety practice. |
| Section 9. PHYSICAL AND CHEMICAL PROPERTIES | |
| Appearance: | Colorless viscous liquid |
| Odour: | Odourless |
| Specific Gravity: | > 1.573 |

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| Bulk Density: | NDA |
| pH: | < 1 |
| Solubility in Water: | Miscible |
| Flash Point: | Not applicable |
| Melting Point: | -17 to -21°C (1.4 to -5.8 °F) |
| Other Information: | |
| Section 10: STABILITY AND REACTIVITY | |
| Stability: | The product is stable |
| Hazardous Decomposition Products: | Oxides of phosphorus |
| Conditions to Avoid: | Store protected from moisture and heat |
| Materials to Avoid: | Reactive with oxidizing agents, combustible materials, metals, alkalis. |
| Section 11: TOXICOLOGICAL INFORMATION | |
| ERMA Classification: | 6.1D (oral), 6.1E (dermal), 8.1A, 8.2C, 8.3A |

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| Ingestion: | Would be expected to cause severe burning and pain in the mouth, throat and abdomen, vomiting, diarrhea. May cause perforation of the esophagus or stomach with vomiting, severe abdominal pain, collapse and death. |
| Inhalation: | Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting |
| Skin: | Severity of injury depends on the concentration and duration of exposure. Dilute solutions may cause moderate irritation. Concentrated solutions may cause pain and severe burns to the skin (based on animal information; no human information available). |
| Eye: | Severity of injury depends on the concentration and duration of exposure. Concentrated solutions cause immediate pain, severe burns and permanent corneal damage which may result in blindness. Dilute solutions or mists may cause irritation |
| Chronic Effects: | Prolonged exposure may result in decreased lung function and CNS depression. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin. |
| Other Information: | |
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Section 12: ECOLOGICAL INFORMATION

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| ERMA Classification: | 9.1D (other), 9.3C |
| Ecotoxicity: | Harmful to aquatic life at low concentrations. |

Section 13: DISPOSAL INFORMATION

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| Product Disposal: | Dispose of waste at an appropriate waste disposal facility according to applicable laws and regulations. Neutralize with lime or other base. Collect |
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| : | in appropriate containers. Dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations and product characteristics at time of disposal. |
| Container Disposal: | Containers, if thoroughly cleaned, preferably by rinsing three times and handling the rinse water as waste residues, may be disposed of or recycled as non-hazardous waste. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material. |
| Section 14: TRANSPORT INFORMATION | |
| UN Number: | 1805 |
| Proper Shipping Name: | PHOSPHORIC ACID, LIQUID |
| DG Class: | 8 |
| UN Packing Group: | III |
| Other Information: | |
| Section 15: REGULATORY INFORMATION | |
| <p>Federal and State Regulations: Connecticut hazardous material survey.: Phosphoric Acid Illinois toxic substances disclosure to employee act: Phosphoric acid Illinois chemical safety act: Phosphoric acid New York release reporting list: Phosphoric acid Rhode Island RTK hazardous substances: Phosphoric acid Pennsylvania RTK: Phosphoric acid Minnesota: Phosphoric acid Massachusetts RTK: Phosphoric acid Massachusetts spill list: Phosphoric acid New Jersey: Phosphoric acid New Jersey spill list: Phosphoric acid Louisiana spill reporting: Phosphoric acid California Director's list of</p> | |

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hazardous substances: Phosphoric acid TSCA 8(b) inventory: Phosphoric Acid; Water
SARA 313 toxic chemical notification and release reporting: Phosphoric acid CERCLA:
Hazardous substances.: Phosphoric acid: 5000 lbs. (2268 kg)

Other Regulations: OSHA: Hazardous by definition of Hazard
Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS E: Corrosive liquid.

DSCL (EEC):R34- Causes burns. S26- In case of contact with eyes, rinse
immediately with plenty of water and seek medical advice. S45-In case of accident or
if you feel unwell, seek medical advice immediately (show the label where possible).

Section 16: OTHER INFORMATION
