

14078 Meridian Parkway, Riverside, CA. 92518

SAFETY DATA SHEET

Version: v1

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SECTION 1:Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Phosphoric acid

Product Number : P433774
Brand : aladdin
CAS-No. : 7664-38-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Company

Company : ALADDIN SCIENTIFIC CORPORATION

Address : 14078 Meridian Parkway,

Riverside, CA. 92518

Telephone : +1 (833) 552-7181 Fax : no data available

1.4 Emergency telephone number

CHEMTREC®, Inside the USA : 1-800-424-9300

CHEMTREC®, Outside the USA :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Corrosive to metals (Category 1), H290

Acute toxicity, Oral (Category 4), H302

Skin corrosion (Sub-category 1B), H314

Serious eye damage (Category 1), H318

2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word

Hazard statement(s)

Danger



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H290 May be corrosive to metals

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

Precautionary statement(s)

P234 Keep only in original container.

P264 Wash hands [and ...] thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER or doctor/physician.

P330 Rinse mouth.

P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

P301+P312 IF SWALLOWED: call a POISON CENTER/doctor/... IF you feel unwell.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN

with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do - continue rinsing.

P405 Store locked up.

P406 Store in corrosive resistant/... container with a resistant inner liner.

P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Orthophosphoric acid

Formula : H3PO4
Molecular weight : 98
CAS No. : 7664-38-2

EC-NO. : no data available

Component Classification Concentration

Phosphoric acid

Met. Corr. 1; Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; H290, H302, H314, crystal, ≥99.999% H318 Concentration limits: >= 25 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin trace metals

Irrit. 2, H315; 10 - < 25 %: Eye Irrit. 2, H319; >= 1 %: Met. Corr. 1, H290; basis



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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine Oxides of phosphorus

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.



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6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU).

Skin protection

Gloves must be checked before use. Please use proper methods to remove the gloves (do not touch the outer surface of the gloves), and avoid any skin parts contacting the product. After use, please handle the contaminated gloves carefully according to relevant laws and regulations and effective laboratory rules and procedures. Please clean and blow dry the protective gloves selected for your hands must meet the specifications given in regulation (EU) 2016 / 425 and the en 374 standard derived from it.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of



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protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance form: Powder, Crystals or Crystalline Powder color: White

b) Odour no data available c) Odour Threshold no data available d) pH no data available

e) Melting point/freezing pointf) Initial boiling point and boiling range213°C

g) Flash point no data available h) Evaporation rate no data available i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits no data available k) Vapour pressure no data available l) Vapour density no data available

m) Relative density 1.68.Corrosive substance5g/mLat 25°C (lit.)1.8.Corrosive

substance30g/mLat 25°C

n) Water solubility no data available
o) Partition coefficient: n-octanol/water no data available
p) Auto-ignition temperature no data available
q) Decomposition temperature no data available
r) Viscosity no data available
s) Explosive properties N no data available
t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available



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10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong bases, Powdered metals

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 oral rat 1250 mg/kg

Remarks: lung, chest, or respiratory system: acute Pulmonary edema

Liver: Changes in liver weight

(RTECS)

Inhalation: No data available

Transcutaneous: No data available

Skin corrosion/irritation

Skin - Rabbit Result: Causing burns- 24 hours Remarks: (ECHA) Note: Classified according to EU CLP Regulation 1272/2008, Annex 6 (Tables 3.1/3.2)

Serious eye damage/eye irritation

Note: Causes serious eye damage. Classification according to EU CLP Regulation 1272/2008, Annex 6 (Tables 3.1/3.2)

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Test type: Ames test Testing system: Escherichia coli/Salmonella typhimurium Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 471 Result: Negative Test type: Mutability (mammalian cell test): Negative for chromosomal variation Testing System: Human Lymphocytes Metabolic activation: with or without metabolic activation effect Method: OECD Testing Guidelines 473 Result: Negative Test type: In vitro mammalian cell gene mutation test Testing system: Mouse lymphoma cells Metabolic activation: with



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or without metabolic activation effect Method: OECD Testing Guidelines 476 Result: Negative

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

Repeated toxicity - rats - male and female - oral administration -90 days - minimum level of observed harmful effects -155 mg/kg

Remarks: (ECHA)

Registration of toxic effects of chemical substances: TB6300000

Burn sensation: coughing, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, may cause cyanosis.

To our knowledge, this chemical, physical, and toxic property has not been fully studied.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to Daphnia magna and other aquatic Invertebrate

Static test EC50- Daphnia magna ->100 mg/l -48 hours

(OECD Testing Guidelines 202)

Static toxicity test on algae ErC50- Desmodesmus subspicatus (green algae) ->100 mg/l -72 hours

(OECD Testing Guidelines 201)

Static toxicity test for bacteria EC50- Activated sludge ->1000 mg/l -3 hours

(OECD Testing Guidelines 209)

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available



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12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

UN number: 3453 Packing group: III Class: 8

Proper shipping name: PHOSPHORIC Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

ACID, SOLID available available

Environmental Hazards: no

IMDG

UN number: 3453 Packing group: III EMS-No: no data available

Proper shipping name: PHOSPHORIC ACID, SOLID

 IATA

UN number: 3453 Packing group: III Class: 8

Proper shipping name: PHOSPHORIC ACID, SOLID

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

Regulatory Affairs

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