

SAFETY DATA SHEET

Phosphoric Acid 75%

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

Date issued 12.11.2012

1.1. Product identifier

Product name Phosphoric Acid 75%
 Synonyms Fosforsyre 75%
 REACH Reg No 01-2119485924-24
 CAS no. 7664-38-2
 EC no. 231-633-2

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

Use of the substance/preparation Fertilizer production. Surface treatment of metals / rust removal. pH regulation.
 Water treatment. Cleaning of process equipment for food production.

1.3. Details of the supplier of the safety data sheet

Distributor

Company name Acinor AS
 Office address Titangt. 13, NO-1630 Gamle Fredrikstad
 Postal address Titangaten 13
 Postcode 1630
 City Gamle Fredrikstad
 Country Norway
 Tel 69384082
 Fax 69384084
 E-mail post@acinor.no
 Website http://www.acinor.no
 Enterprise no. NO 984 648 324 MVA
 Contact person Rolf Egil de Flon

1.4. Emergency telephone number

Emergency telephone Toxic Information:22 59 13 00

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC C; R34
 Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] Skin Corr 1B; H314;
 Substance / mixture hazardous properties Causes severe skin burns and eye damage.

2.2. Label elements

Hazard Pictograms (CLP)



Composition on the label	Orthophosphoric acid ...%: 70 - 85 %
Signal word	Danger
Hazard statements	H314 Causes Severe skin burns and eye damage.
Precautionary statements	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire. P280 Wear protective gloves/protective clothing/eye protection/face protection. P101 If medical advice is needed, have product container or label at hand. P273 Avoid release to the environment.

2.3. Other hazards

PBT / vPvB	PBT/vPvB assessment has not been performed.
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SECTION 3: Composition/information on ingredients

3.1. Substances

Component name	Identification	Classification	Contents
Orthophosphoric acid ...%	CAS no.: 7664-38-2 EC no.: 231-633-2 Index no.: 015-011-00-6 Synonyms: Orthophosphoric acid	C; R34 Skin Corr. 1B; H314	70 - 85 %
Water	CAS no.: 7732-18-5 EC no.: 231-791-2		15 - 30 %
Component comments	See section 16 for explanation of H- and R-phrases listed above.		

SECTION 4: First aid measures

4.1. Description of first aid measures

General	If in doubt, seek medical advice.
Inhalation	Fresh air and rest. Rinse nose and mouth with water. Get medical attention if any discomfort continues. For breathing difficulties oxygen may be necessary.
Skin contact	Remove contaminated clothing. Flush skin thoroughly with water. Important to remove the substance from the skin immediately. Get medical attention. Chemical burns must be treated by a physician. Wash contaminated clothes before reuse.
Eye contact	Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 15 minutes. Remove contact lenses and open eyes wide apart. Immediately consult a doctor. Transport to physician. Keep on flushing during transport.
Ingestion	DO NOT INDUCE VOMITING! Rinse mouth thoroughly. Drink a few glasses of water or milk. Do not give victim anything to drink if he is unconscious. Immediately consult a doctor. Transport to hospital. Bring the safety data sheet.

4.2. Most important symptoms and effects, both acute and delayed

Information for health personnel	Treat Symptomatically.
Acute symptoms and effects	Corrosive. Forms blisters and can cause ulceration. Corrosive to the eyes, danger of vision impairment / blindness, burning nose, chemical burns to the skin. Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage. Inhalation: May cause chemical burns to the respiratory tract.
Delayed symptoms and effects	Langvarig eller gjentatt påvirkning kan gi varige skader.

4.3. Indication of any immediate medical attention and special treatment needed

Other Information	Splashes in the eyes and ingestion of more than an insignificant amount requires immediate medical attention. Chemical burns of the skin must be treated as burns.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Dry-powder, carbon dioxide (CO₂), water mist, foam.

Improper extinguishing media Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards The product is not classified as flammable.

Hazardous combustion products Oxides of phosphorous (PO_x). Phosphoric acid mist.

5.3. Advice for firefighters

Personal protective equipment Use fresh air equipment when the product is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.

Other Information Containers close to fire should be removed immediately or cooled with water. Spill water from fire fighting may be strongly caustic. Extinguishing water must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid inhalation of spray mist and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Do not allow to enter into sewer, water system or soil.

6.3. Methods and material for containment and cleaning up

Methods for cleaning Absorb in vermiculite, dry sand or earth and place into containers. Collect in a suitable container and dispose as hazardous waste according to section 13.

6.4. Reference to other sections

Other instructions See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling Use protective equipment as referred to in section 8. Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid direct contact. Never pour water into acid/base. Dilute by slowly pouring the product into water while stirring. Be aware of the risk of exothermic reactions. Immediately change contaminated clothes.

Protective Measures

Advice on general occupational hygiene Wash hands at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke during work.

7.2. Conditions for safe storage, including any incompatibilities

Storage Store in a tightly closed container in a cool, well-ventilated room, protected from direct sunlight. Store in a dry place. Corrosive storage.

Hints on storage assembly Keep away from: Bases.

7.3. Specific end use(s)

Specific use(s) See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

Component name	Identification	Value	Year
Phosphoric acid	CAS no.: 7664-38-2	8 h.: 1 mg/m ³	2007

EC no.: 231-633-2
Index no.: 015-011-00-6

8.2. Exposure controls

Occupational exposure controls Provide adequate ventilation. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Respiratory protection

Respiratory protection In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type B2/P2).

Hand protection

Hand protection Use chemical resistant gloves.
Suitable gloves type Polyvinyl chloride (PVC). Neoprene. Nitrile. Rubber (natural, latex). Butyl rubber.
Breakthrough time Penetration time is not known. The recommended material of gloves is recommended after a study of the single components in the product.

Eye / face protection

Eye protection Use approved safety goggles or face shield.

Skin protection

Skin protection (other than of the hands) Wear appropriate clothing to prevent any possibility of skin contact.
Additional skin protection measures Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes wet or contaminated.

Other Information

Other Information Eye wash facilities and emergency shower should be available when handling this product. The listed protective equipment is a recommendation. A risk assessment of the actual risk may lead to other requirements.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Viscous liquid.
Colour	Colourless.
Odour	No characteristic odour.
Comments, Odour limit	Not known.
pH (as supplied)	Value: < 1
Comments, pH (as supplied)	Concentrated solution.
Comments, Melting point / melting range	Not known.
Boiling point / boiling range	Value: 140 °C
Comments, Flash point	Not known.
Comments, Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Comments, Explosion limit	Not known.
Comments, Vapour pressure	Not known.
Comments, Vapour density	Not known.
Specific gravity	Value: 1,63 g/cm ³
Comments, Specific gravity	Valid for density.
Solubility in water	Soluble.
Comments, Partition coefficient: n-octanol / water	Not known.
Comments, Spontaneous combustability	Not known.
Comments, Decomposition temperature	Not known.

Comments, Viscosity Not known.

Physical hazards

Explosive properties Not known.

Oxidising properties Not known.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties Freezing point: -15°C.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Reactive with the materials listed in Section 10.5.

10.2. Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Arise in contact with incompatible materials (section 10.5) and inappropriate conditions (section 10.4).

10.4. Conditions to avoid

Conditions to avoid Do not add water directly to the product. It may cause a violent reaction.
Generates heat upon contact with water.

10.5. Incompatible materials

Materials to avoid Bases, alkalis (organic). Bases, alkalis (inorganic).

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological Information:

LD50 oral Value: 1530 mg/kg
Test animal species: Rat
Comments: (25%)

LD50 dermal Value: 2740 mg/kg
Test animal species: Rabbit

Other information regarding health hazards

General This substance is corrosive.

Potential acute effects

Inhalation Vapours are corrosive. After 24-36 hours, injured persons may develop serious shortness of breath and lung oedema.

Skin contact Corrosive. Prolonged contact causes serious tissue damage. Cause blisters and burns.

Eye contact Corrosive. Immediate first aid is necessary. Risk of serious damage to eyes. Risk of permanent corneal damage, loss of sight and blindness.

Ingestion Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage. Risk of perforation of the stomach if there has been swallowed large amounts.

Delay / Repeating

Sensitisation None of the substances mentioned in section 3 is considered to have sensitizing effects according to current labelling rules.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity None of the substances mentioned in section 3 is considered as carcinogenic according to current labelling rules.

Mutagenicity	None of the substances mentioned in section 3 are considered to have mutagenic or pro-mutagenic effects.
Teratogenic properties	None of the substances mentioned in section 3 are considered to cause harm to the unborn child.
Reproductive toxicity	None of the substances mentioned in section 3 are considered to have genotoxic effects.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	The product is not classified as dangerous for the environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms. Evaluate the necessity of neutralization.
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12.2. Persistence and degradability

Persistence and degradability	The product contains inorganic compounds that are not biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	Product is not expected to be bioaccumulative.
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12.4. Mobility in soil

Mobility	The product is miscible with water. May spread in water systems.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	PBT assessment has not been performed.
vPvB evaluation results	vPvB assessment has not been performed.

12.6. Other adverse effects

Other adverse effects / Remarks	Acids cause decreased pH values in the water. A low pH value harms aquatic organisms. Do not allow to enter into sewer, water system or soil.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned above.
Product classified as hazardous waste	Yes
EWC waste code	EWC: *06 01 04 phosphoricand phosphorous acid
NORSAS	7131 Acids, inorganic.

SECTION 14: Transport information

14.1. UN number

ADR	1805
RID	1805
IMDG	1805
ICAO/IATA	1805

14.2. UN proper shipping name

ADR	PHOSPHORIC ACID, SOLUTION
RID	PHOSPHORIC ACID, SOLUTION
IMDG	PHOSPHORIC ACID SOLUTION
ICAO/IATA	PHOSPHORIC ACID, SOLUTION

14.3. Transport hazard class(es)

ADR	8
Hazard no.	80
RID	8
IMDG	8

ICAO/IATA 8

14.4. Packing group

ADR III

RID III

IMDG III

ICAO/IATA III

14.5. Environmental hazards

IMDG Marine pollutant No

14.6. Special precautions for user

ADR Other applicable information Classification code: C1

EmS F-A, S-B

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**Other applicable information.**

Other applicable information. Not relevant.

SECTION 15: Regulatory information

EC no. 231-633-2

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

References (laws/regulations)

Norwegian regulation on classification and labeling of dangerous chemicals. Valid from June 21, 2010.

Regulation on classification, labeling and packaging of substances and mixtures (CLP) dated 16.06.2012.

Commission Regulation (EU) No 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II Safety Data Sheets.

Administrative norms for pollution of the atmosphere, the latest edition, from Norwegian labour inspection authority

Norwegian regulations on waste, no. 930/2004, from Ministry of the Environment.

Dangerous Goods regulations

The Safety Data Sheet is based on information provided by the producer.

Declaration no. 93941

15.2. Chemical safety assessment

Chemical safety assessment has been carried out No

SECTION 16: Other information

Supplier's notes The information contained in this SDS must be made available to all those who handle the product.

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] Skin Corr 1B; H314;

List of relevant R phrases (under headings 2 and 3). R34 Causes burns.

List of relevant H-phrases (Section 2 and 3). H314 Causes Severe skin burns and eye damage.

Abbreviations and acronyms used PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Sources of key data used to compile the safety data sheet Version: 4 from supplier, dated: 16.12.2012.

Information which has been added, deleted or revised	New Safety Data Sheet.
Checking quality of information	This SDS is quality controlled by National Institute of Technology in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2008.
Responsible for safety data sheet	Acinor AS
Prepared by	National Institute of Technology as, Norway v/ Camilla M. Ormset