

SAFETY DATA SHEET

Safety data sheet according to (EF) no. 1907/2006.

POINT 1: Identification of material/compounds and of the company/factory

1.1. Product identifier:

Orthophosphoric acid

1.2. Relevant identifying use of the material or compound and the usage that is contraindicated:

Industrial use.

1.3. Detailed information about the supplier for the safety data sheet:

OQEMA ApS
Vordingborgvej 187
4682 Tureby
Denmark
Tel.: +45 5663 8600

Responsible for safety data sheet (e-mail): OQEMA@OQEMA.dk

1.4. Emergency phone:

Contact the poison centre in your own country.

POINT 2: Identification of danger

2.1. Classification of the material or compound:

CLP (1272/2008): Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318

2.2. Label elements:



Contains:	Orthophosphoric acid
H290:	May be corrosive to metals.
H302:	Harmful if swallowed.
H314:	Causes severe skin burns and eye damage.
P260:	Do not breathe fume.
P280:	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P310:	IF SWALLOWED: Immediately call a POISON CENTER/doctor.

2.3. Other dangers:

PBT/vPvB: The ingredients are not PBT/vPvB.

POINT 3: Compensation of/information about contents

3.1. Compensation of/information about contents

3.2. Compounds:

Substance name	CAS	EF-No.	Index-no.	REACH reg.no.	Substance Classification	Note
Orthophosphoric acid	7664-38-2	231-633-2	-	-	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	-

The wording of the hazard statements - see paragraph 16.

POINT 4: First aid measures

4.1. Description of first aid measures:

Inhalation: Seek fresh. Immediately seek medical attention.

Skin: Immediately remove contaminated clothing. Rinse skin and wash thoroughly with water. Immediately seek medical attention.

Eyes: If possibly remove contact lenses and open the eye wide. Immediately rinse with water (preferably from eye wash). Immediately seek medical attention. Rinsing is continued until a doctor has undertaken the treatment.

Ingestion: Rinse mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Immediately seek medical attention.

Recommended personal protective equipment for first aiders: Use the required personal protective equipment.

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

General symptoms and effects: May cause deep burns, pain, epiphora and cramping of the eyelids. Risk of severe eye damage and blindness. Tissue-damaging effects: The product contains substances that are corrosive. If vapor or aerosols are inhaled, it can cause lung damage and cause irritation and sting in the respiratory organs as well as cough. Corrosive substances cause irreversible damage to the eyes. Corrosive to the skin.

4.3. Indication of whether emergency medical attention and special treatment are needed: -

POINT 5: Fire suppression

5.1. Suppression methods:

Suitable suppression methods: The product cannot burn. Fire suppression method is selected in consideration of any other chemicals. Use water or water fogging to cool unignited storage.

Unsuitable as a fire suppression method: Do not use a water jet as it can spread the fire.

5.2. Special dangers in connection with the material or compound:

Dangerous combustion products: In case of fire, toxic gases are formed

5.3. Indication for a fire department:

If possible, remove containers. Use compressed air mask for heavy smoke.

POINT 6: Accidental release measures

6.1. Personal precautions, personal protective equipment, and emergency procedures:

Personal protective equipment: Use breathing apparatus with fresh-air respirators.

Other information: Quenching water that has been in contact with the product can be corrosive.
Precautionary measure for personal protection: Wear protective gloves/protective clothing/eye protection/face protection.

For emergency personnel: Chemical emergency suit corresponding to EN 943-2 is recommended.

6.2. Environmental protection indications:

Avoid discharge to drains and/or surface water. Contact environmental authorities in case of pollution of soil and aquatic environment as well as by discharge to drains.

6.3. Methods and equipment for containment and cleaning:

Spillage is contained and collected with sand or other absorbent fire resisting material and transferred to suitable containers.

6.4. References to other points:

See point 8 for protective equipment.

See point 13 for disposal.

POINT 7: Handling and storage

7.1. Measures for safe handling:

All work must be carried out under effective ventilation. Wash hands before breaks, toilet visits and after work. Do not eat, drink or smoke while working. There must be access to running water and eyewash. See point 8 for information on precautions during use and personal protective equipment.

7.2. Conditions for safe storage, including any incompatibility:

Storage: Should be stored in well-closed original container.

Storage temperature: Value: > 15 °C

7.3. Special usage:

See use - point 1.

PUNKT 8: Exposure control/personal protective equipment

8.1. Control parameter:

Component name	Identification	Limit values	Norm year
Orthophosphoric acid	CAS-no.: 7664-38-2	Vountry of origin: EU 8 h. limie value: 1 mg/m ³	

DNEL:	Exposure	Value	Population	Effects
Orthophosphoric acid	Long-term, inhalation	1 mg/m ³	Professional	Local
	Acute, inhalation	2 mg/m ³	Professional	Local
	Long-term, inhalation	0,36 mg/m ³	Consumer	Local
	Long-term, oral	0,1 mg/kg bw/day	Consumer	Systemic
	Long-term, inhalation	10,7 mg/m ³	Professional	Systemic
	Long-term, inhalation	4,57 mg/m ³	Professional	Systemic

8.2. Exposure control:

Suitable eye protection:

Use safety goggles or a face shield.

Skin / hand protection, short-term contact:

Wear protective gloves made of butyl rubber, nitrile rubber. Neoprene rubber. Breakthrough time:
Value > 8 hours.

Suitable protective clothing:

Use special workwear. Possibly use a rubber apron and rubber boots.

Tasks that require respiratory protection: In case of spraying, a suitable self-rescuer must be used.
Recommended respiratory protection: Filter type: B/P.
Environmental exposure controls: It must be ensured that local regulations for discharge are obeyed.

POINT 9: Physical and chemical characteristics

9.1. Information about basic physical and chemical characteristics:

Appearance	Liquid
Colour	Uncoloured Yellowish
Odor	Characteristic
pH	Status: In aqueous solution Value: < 1 Method: 1%
Melting point/melting range	Value: -17 °C
Boiling point/boiling range	Value: 135 °C
Flash point	Value: -
Vapor pressure	Value: 1.33 kPa Temperature: 30 °C
Density	Value: 1.58 g/cm ³ Temperature: 20 °C
Solubility	Medium: Water Remarks: Soluble
Viscosity	Value: 15.2 mm ² /s Method: kinematic Temperature: 20 °C

9.2. Other information: None known.

POINT 10: Stability and reactivity

10.1. Reactivity:

Reacts with metals to form hydrogen with risk of forming explosive hydrogen -/air mixtures.

10.2. Chemical stability:

The product is stable when used in accordance with manufacturer's instructions.

10.3. Risk of dangerous reactions:

None known.

10.4. Conditions that should be avoided:

None known.

10.5. Materials that should be avoided:

Avoid contact with strong bases. Avoid contact with strong reducing agent. Avoid contact with metals.
Avoid contact with strong acids. Avoid contact with the following: chlorinated compounds Metals.

10.6. Dangerous decomposition products:

None by the recommended storage conditions.

POINT 11: Toxicological information

11.1. Information about hazard classes as defined in Regulation (EC) No 1272/2008:

Assessment eye damage or irritation, classification: Causes severe skin burns and eye damage.

Assessment respiratory sensitization, classification: Based on available data, the classification criteria are not met.

Assessment skin sensitization, classification: Based on available data, the classification criteria are not met.

Inhalation: Inhalation of fumes may irritate the upper respiratory tract.

Ingestion: Ingestion may cause corrosion of the mouth, oesophagus and stomach.

Assessment Germ cell mutagenicity, classification: Based on available data, the classification criteria are not met.

Assessment carcinogenicity classification: Based on available data, the classification criteria are not met.

Assessment reproduction toxicity, classification: Based on available data, the classification criteria are not met.

Assessment of specific organ toxicity - single exposure, classification: Based on available data, the classification criteria are not met.

Assessment of specific organ toxicity - repeated exposure, classification: Based on available data, the classification criteria are not met.

Assessment of aspiration, danger classification: Based on available data, the classification criteria are not met.

Danger class	Data	Test	Data source
Acute toxicity: Inhalation	LC ₅₀ (rat) > 850 mg/L (Orthophosphoric acid)	Not informed	Supplier
Dermal	LD ₅₀ (rabbit) > 2740 mg/kg bw (Orthophosphoric acid)	Not informed	Supplier
Oral	LD ₅₀ (rat) > 300 – 2000 mg/kg (Orthophosphoric acid)	Not informed	Supplier
Corrosivity/ irritation:	Causes severe burns of the skin and eye injury. (Orthophosphoric acid)		

11.2. Information about other hazards: None known.

POINT 12: Environmental information

12.1. Toxicity:

Aquatic	Data	Test (Media)	Data source
Crustacean	EC ₅₀ (Daphnia magna, 48h) = > 100 mg/L (Orthophosphoric acid)	Not informed	Supplier
Alga	EC ₅₀ (Desmodesmus subspicatus, 72h) = >100 mg/l (Orthophosphoric acid)	Not informed	Supplier

12.2. Persistence and degradability:

Not relevant for inorganic substance

12.3. Bioaccumulative potential:

No bioaccumulation.

12.4. Mobility in soil:

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12.5. Results of PBT and vPvB assessment:

The ingredients are not PBT/vPvB.

12.6. Endocrine-disrupting capacities:

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12.7. Other adverse effects:

The product will locally change the pH value in the aquatic environment.

POINT 13: Removal

13.1. Methods for waste handling:

Spills and waste are collected in well-closed containers, which are disposed of via the local authority's collection scheme for hazardous waste with the specifications below.

Chemical waste group: EAK-code:
060104 (Orthophosphoric acid and phosphorous acid)

POINT 14: Transport information

14.1. UN-number or ID-number: 1805

14.2. UN-shipment designation (UN proper shipping name): ORTHOPHOSPHORIC ACID SOLUTION

14.3. Transport danger class(es): 8

14.4. Packaging group: III

14.5. Environmental dangers: No.

14.6. Special regulations for the user: None.

14.7. Bulk transport by sea according to IMO instruments: Not relevant.

POINT 15: Information about regulations

15.1. Special determinations/special rules for the material or compound with respect to safety, health and environment:

The product must not be used commercially by young people under 18 years of age. However, young people over the age of 15 are exempt from this rule if the product is included as a necessary part of an education.

PR-no.: 1711622

15.2. Chemical safety evaluation:

Chemical safety assessment is complete: Yes

POINT 16: Other information

Hazard statements given under point 2 and 3:

H290: May be corrosive to metals.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

Recommendations regarding training: No special training is necessary, but a thorough knowledge of this safety data sheet should be a prerequisite.

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