# Material Data Safety Sheet

According to (EG) Nr. 1907/2006 (REACH)

**Updated:12.04.2011**

ortho-Phosphoric acid, 85%, Art. Nr. 30190

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
Product name : ortho-Phosphoric acid, 85%,
Product Number : 30190
Company:
Gatt-Koller GmbH
Swarovskistrasse 74
A-6067 Absam
Phone: 0043-5223-44216-0
Fax: 0043-5223-43216
Emergency Phone: 0049-551-19240

2. HAZARDS IDENTIFICATION

Label elements
Pictogram

Signal word Danger
Hazard statement(s)

| | |
|---|---|
| H314 | Causes severe skin burns and eye damage. |
| H290 | May be corrosive to metals. |

Precautionary statement(s)

| | |
|---|---|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P301 + P330 + P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P501 | Dispose of contents/container to … |

(67/548/EWG oder 1999/45/EG)
Symbol: C (Corrosive)
R-phrases: 34 Causes burns.

3. Composition/information on ingredients
Identification and amount of the components:
Synonyms:Orthophosphoric acid
CAS: 7664-38-2
Molecula weight:98.00
EC index no,:015-011-00-6
EC number:231-633-2
Formula: H3PO4
4. First aid measures
After inhalation: Fresh air. Summon doctor.
After skin contact: wash off with plenty of water. Dab with polyethylene glycol 400. Immediately remove contaminated clothing.
After ingestion: plenty of water to drin, avoid vomiting (risk of perforation!). Immediately summon doctor.
Do not attempt to neutralize.

After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately summon eye specialist.
5. Fire-fighting measures
Suitable extinguishing media: To suit environment.
Special risks: Non-combustible. Formation of combustion gases or dangerous vapours possible in event of fire. Hydrogen may form upon contact with metals (danger of explosion!).
Special protective equipment for fire fighting: Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.
Further information: Contain escaping vapours with water.
Prevent fire-fighting water from entering surface water or groundwater.
6. Accidental release measures
Person-related precautionary measures: Do not inhale vapours/aerosols. Avoid substance contact. Ensure supply of fresh air in enclosed rooms.
Environmental precautions: Do not allow to enter sewerage system.
Procedures for cleaning / absorption: Take up with liquid-absorbent material. Forward for disposal. Clean up. Neutralize with diluted sodium hydroxide solution or by throwing on chalk, lime sand, or sodium carbonate.
7. Handling and storage
Handling: No further requirements.
Storage: Store tightly closed, dry, in a well-ventilated place. Store at + 15°C to + 25°C.
8. Exposure controls/personal protection
Exposure limit values: (MAK, Germany): Exposure controls:
Occupational exposure controls: The personal protective equipment must be selected according to the working place, based on the concentration and amount of the dangerous substance. The supplier should indicate the stability of the personal protective equipment to chemical reagents.
Respiratory protection: required when vapours/aerosols are generated.
Hand protection: required
Eye protection: required
Skin protection: Suitable protective clothing. Apply skin- protective barrier cream.
Industrial hygiene: Immediately change contaminated clothing. Wash hands and face after working with substance.
9. Physical and chemical properties
General information:
Form: liquid
Colour: colourless
Odour: odourless
Important health, safety and environmental information:
pH value: (100 g/l $H_2O$, 20 ºC) < 0,5
Boiling temperature: ~ 158 ºC
Flash point: ---
Explosion limits (low): ---
Explosion limits (high): ---
Vapour pressure: (25 ºC) 2,2 hPa
Density (20 °C): 1,71 g/cm3
Solubility in water: (20 °C): miscible
Viscosity: ---
Refractive index: ---
Melting temperature: ~ 21 ºC
Ignition temperature: ---
10. Stability and reactivity
Conditions to be avoided: No information available.
Substances to be avoided: strong bases, metallic oxides, metals, metal alloys; the following may develop: hydrogen
Hazardous decomposition products: No information available.
Further information: hygroscopic.
Incompatible with: iron, steel, aluminium.
11. Toxicological information
Acute toxicity:
The literature data available to us do not conform with the labelling prescribed by the EC. The EU has dossiers which have not been published.
LD50(oral, rat): 1530 mg/kg (anhydrous substance)
LC50 (inhalation, rat): > 0,85 mg/l /1h (anhydrous substance)
LD50 (dermal, rabbit): 2740 mg/kg (anhydrous substance)
Specific symptoms in animal studies:
Eye irritation test (rabbit): Severe irritations.

Skin irritation test (rabbit): Severe irritations.
Further toxicological information:
After inhalation: Irritating to respiratory system.
After skin contact: burns
After eye contact: conjunctivitis, burns. Risk of blindness! .
After ingestion: After ingestion: burns, strong pain (risk of perforation!), shock, spasms.
Further information:
The product should be handled with the care usual when dealing with chemicals.

## 12. Ecological information

Ecotoxic effects: Damage of aquatic organisms. Caustic even in diluted form. Harmful effect due to pH shift.
Fish toxicity: IC0 : < 138 mg/l
Persistence and degradability: Does not cause biological oxygen deficit. Methods for determination of biodegradability can not be applied to inorganic substances.
Further ecologic data:
Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of drinking- water supplies.
Do not allow to enter waters, waste water, or soil!

## 13. Disposal considerations

Product: There are no uniform EU Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EU member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.
Packaging: Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

## 14. Transport information

Road transport:
UN-No: 1805
ADR class: 8 C1 III
Correct technical name: PHOSPHORIC ACID, LIQUID
Sea transport:
UN-No: 1805
IMDG class: 8 III
EMS-Number: F-A S-B
Correct technical name: PHOSPHORIC ACID, LIQUID
Air transport:
UN-No: 1805
IATA/ICAO class: 8 III
Correct technical name: PHOSPHORIC ACID, LIQUID

## 15. Regulatory information

Pictogram

Signal word Danger
Hazard statement(s)

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Precautionary statement(s)

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EC-classification: This product has been included in the dangerous substances index with its corresponding EC index number, so it has been classified according to the 67/548/EEC directive and its later adaptations.
Symbol: C (Corrosive)
R-phrases: 34 Causes burns.
S-phrases: 23.2-51-26-36/37/39-45 Do not breathe vapour. Use only in well ventilated areas. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
EC-Index-No: 015-011-00-6
German regulations
Water pollution class 1 (slightly polluting substance) VwVwS Anh. 2 KennNr. 392
Storage class VCI 8 B

EC-classification:

16. OTHER INFORMATION
WARRANTY
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Gatt-Koller GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.
DISCLAIMER
For R&D use only. Not for drug, household or other uses.
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