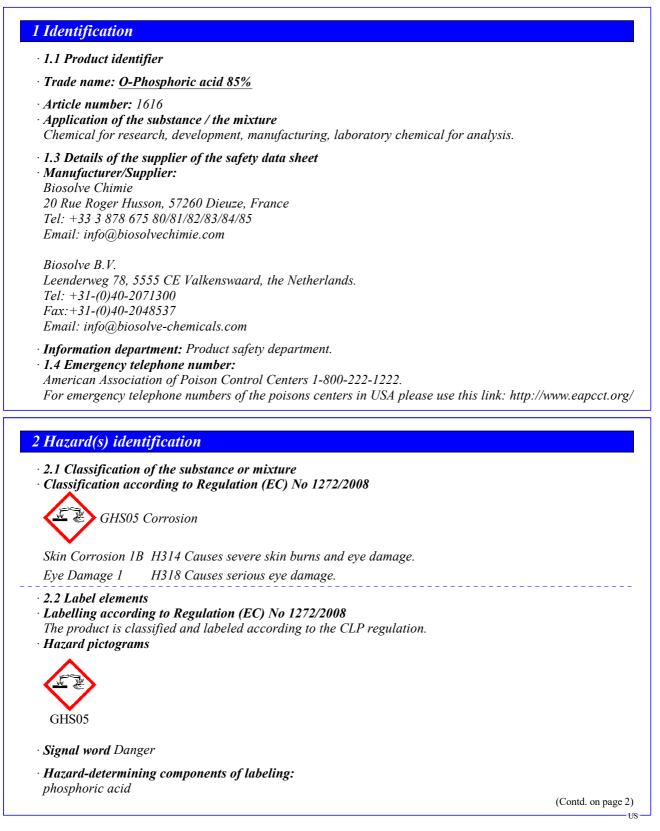


Printing date 12/27/2023

Reviewed on 10/19/2022

Page 1/12





Printing date 12/27/2023

Reviewed on 10/19/2022

Page 2/12

Trade name: O-Phosphoric acid 85%

Hazand statem	(Contd. of page 1)
Hazard stateme	
	vere skin burns and eye damage.
<b>Precautionary</b>	
P260	Do not breathe dusts or mists.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
	331 If swallowed: Rinse mouth. Do NOT induce vomiting.
<i>P303+P361+P</i> .	353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
<i>P305+P351+P</i> .	338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, ip present and easy to do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international
F	$\begin{aligned} \text{Health} &= 3\\ \text{Fire} &= 0\\ \text{eactivity} &= 0 \end{aligned}$
HMIS-ratings (	
FIRE 0	Health = 3 Fire = 0 Reactivity = 0
2.3 Other hazan Results of PBT PBT: Not appli vPvB: Not appl	and vPvB assessment cable.
<b>Composition</b>	/information on ingredients
	haracterization: Mixtures ixture of the substances listed below with nonhazardous additions.

· Dangerous components:

\*

CAS: 7664-38-2 phosphoric acid Index number: 015-011-00-6 RTECS: TB 6300000 75-100%

US

(Contd. on page 3)



Printing date 12/27/2023

Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 2)

Page 3/12

### 4 First-aid measures

- 4.1 Description of first aid measures
- $\cdot$  **General information:** Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- *After swallowing:* Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

### 5 Fire-fighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 5.2 Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- *Protective equipment: Mouth respiratory protective device.*

### 6 Accidental release measures

Mount respiratory protective device.	
Wear protective equipment. Keep unprotected persons away.	
6.2 Environmental precautions:	
Dilute with plenty of water.	
Do not allow to enter sewers/ surface or ground water.	
6.3 Methods and material for containment and cleaning up:	
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).	
Use neutralizing agent.	
Dispose contaminated material as waste according to section 13.	
Ensure adequate ventilation.	
6.4 Reference to other sections	
See Section 7 for information on safe handling.	
See Section 8 for information on personal protection equipment.	
See Section 13 for disposal information.	
Protective Action Criteria for Chemicals	
PAC-1:	
CAS: 7664-38-2 phosphoric acid	3 mg/n
<i>PAC-2:</i>	
CAS: 7664-38-2 phosphoric acid	30 mg/n
(C	ontd. on pag



Printing date 12/27/2023

Reviewed on 10/19/2022

Page 4/12

(Contd. of page 3)

 $150 \text{ mg/m}^{3}$ 

#### Trade name: O-Phosphoric acid 85%

#### • *PAC-3*:

### CAS: 7664-38-2 phosphoric acid

7 Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

• *Information about protection against explosions and fires: Keep respiratory protective device available.* 

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- Requirements to be met by storerooms and receptacles:

Store at room temperature in a shaded and ventilated place.

- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

· 8.1 Control parameters

• Additional information about design of technical systems: No further data; see section 7.

• Components with limit values that require monitoring at the workplace:

### CAS: 7664-38-2 phosphoric acid

- PEL Long-term value: 1 mg/m<sup>3</sup>
- *REL* Short-term value: 3 mg/m<sup>3</sup>
- Long-term value: 1 mg/m<sup>3</sup>
- *TLV* Short-term value: 3 mg/m<sup>3</sup> Long-term value: 1 mg/m<sup>3</sup>

• *Additional information:* The lists that were valid during the creation were used as basis.

- · 8.2 Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 5)

US



Printing date 12/27/2023

Reviewed on 10/19/2022

#### Trade name: O-Phosphoric acid 85%

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### • Eye protection:



Tightly sealed goggles

9.1 Information on basic physical a	ind chemical properties	
General Information Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	No data available	
pH-value at 20 °C (68 °F):	<0.5	
Change in condition		
Melting point/Melting range:	21 °C (69.8 °F)	
Boiling point/Boiling range:	158 °C (316.4 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	No data available	
Ignition temperature:	Product is not selfigniting.	

Page 5/12

(Contd. of page 4)



Printing date 12/27/2023

Reviewed on 10/19/2022

Page 6/12

#### Trade name: O-Phosphoric acid 85%

		(Contd. of page
• Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	No data available	
Upper:	No data available	
· Vapor pressure at 20 °C (68 °F):	2 hPa (1.5 mm Hg)	
· Density at 20 °C (68 °F):	1.7 g/cm <sup>3</sup> (14.19 lbs/gal)	
· Relative density	No data available	
· Vapor density	No data available	
· Evaporation rate	No data available	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octanol/wate	er): No data available	
· Viscosity:		
Dynamic at 20 °C (68 °F):	30.5 mPas	
· Solvent content:		
Water:	15.0 %	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gl	
Solids content:	85.0 %	
· 9.2 Other information	No further relevant information available.	

### 10 Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- $\cdot$  10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

### **11 Toxicological information**

- · 11.1 Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.
- Primary irritant effect:
- on the skin:
- Causes severe skin burns and eye damage.
- on the eye:
- Causes serious eye damage.

(Contd. on page 7)



Printing date 12/27/2023

Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

- Sensitization: Based on available data, the classification criteria are not met. • Additional toxicological information:
- Auditional loxicological injoi
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

### · NTP (National Toxicology Program)

None of the ingredients is listed.

### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- *Reproductive toxicity Based on available data, the classification criteria are not met.*
- Specific target organ toxicity single exposure
- Based on available data, the classification criteria are not met.
- · Specific target organ toxicity repeated exposure
- Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

## **12 Ecological information**

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- $\cdot$  12.6 Other adverse effects No further relevant information available.

(Contd. on page 8)

Page 7/12

(Contd. of page 6)



Printing date 12/27/2023

Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 7)

### **13 Disposal considerations**

· 13.1 Waste treatment methods

· Recommendation:

\*

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- *Recommendation:* Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

14.1 UN-Number		
DOT, ADR, IMDG, IATA	UN1805	
14.2 UN proper shipping name		
DOT	Phosphoric acid solution	
ADR	UN1805 Phosphoric acid solution	
IMDG, IATA	PHOSPHORIC ACID, SOLUTION	
14.3 Transport hazard class(es)		
DOT		
UT BE CORROSVE		
Class	8 Corrosive substances	
Label	8	
ADR		
Class	8 (C1) Corrosive substances	
Label	8	
IMDG, IATA		
Class	8 Corrosive substances	
Label	8	

Page 8/12



Printing date 12/27/2023

Reviewed on 10/19/2022

Page 9/12

Trade name: O-Phosphoric acid 85%

	(Contd. of page
· 14.4 Packing group · DOT, ADR, IMDG, IATA	111
<ul> <li>14.5 Environmental hazards:</li> <li>Marine pollutant:</li> </ul>	No
<ul> <li>14.6 Special precautions for user</li> <li>Hazard identification number (Kemler code):</li> <li>EMS Number:</li> <li>Segregation groups</li> <li>Stowage Category</li> </ul>	Warning: Corrosive substances 80 F-A,S-B Acids A
· 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	o <b>f</b> Not applicable.
· Transport/Additional information:	
· ADR · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

## **15 Regulatory information**

• 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara

• Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

CAS: 7664-38-2 phosphoric acid

#### • TSCA (Toxic Substances Control Act):

CAS: 7664-38-2 phosphoric acid

CAS: 7732-18-5 water, distilled, conductivity or of similar purity

· Proposition 65

#### • Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

(Contd. on page 10)



Printing date 12/27/2023

Reviewed on 10/19/2022

Page 10/12

(Contd. of page 9)

#### Trade name: O-Phosphoric acid 85%

• Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Product safety department

#### · Contact:

*Austria German Vergiftungsinformations* zentrale 01 406 43 43 http://www.goeg.at/de/VIZ Belgium French Centre antipoison 070 245 245 http://www.centreantipoisons.be

Dutch Antigif centrum 070 245 245 http://www.antigifcentrum.be

German Giftinformationszentrum 070 245 245 http://www.poisoncentre.be

Bulgaria\* Bulgarian Токсикологични центрове 02 9154 411 https://pirogov.eu/bg

Croatia\* Croatian Centar za kontrolu otrovanja +385 1 2348 342 https://www.imi.hr/en/jedinica/poison-control-centre

Czech Rep Czech Toxikologické informační středisko +420 224 91 92 93; +420 224 91 54 02 http:// www.tis-cz.cz

Denmark Danish Giftlinien +45 8212 1212 https://www.bispebjerghospital.dk/giftlinien

Estonia Estonian Mürgistusteabekeskus 16662; +372 7943 794 https://www.16662.ee

Finland Finnish Myrkytystietokeskus 0800 147 111; +358 9 471 977 http://www.hus.fi/sairaanhoito/ sairaanhoitopalvelut/myrkytystietokeskus/Sivut/default.aspx

France French Angers +33 2 41 48 21 21 http://www.centres-antipoison.net/angers/index.html

Bordeaux +33 5 56 96 40 80 http://www.centres-antipoison.net/bordeaux/index.html

Lille +33 0800 59 59 59 http://www.centres-antipoison.net/lille/index.html

Lyon +33 4 72 11 69 11 http://www.centres-antipoison.net/lyon/index.html

Marseille +33 4 91 75 25 25 http://www.centres-antipoison.net/marseille/index.html

Nancy +33 3 83 22 50 50 http://www.centres-antipoison.net/nancy/index.html

Paris +33 1 40 05 48 48 http://www.centres-antipoison.net/paris/index.html

Strasbourg +33 3 88 37 37 http://www.centres-antipoison.net/strasbourg/index.html

Toulouse +33 5 61 77 74 47 http://www.centres-antipoison.net/toulouse/index.html

Germany German Berlin +49 30 19240 https://giftnotruf.charite.de Bonn +49 228 19240 http://www.gizbonn.de/index.php?id=272 Erfurt +49 361 730730 https://www.ggiz-erfurt.de/home.html

(Contd. on page 11)



Printing date 12/27/2023

Reviewed on 10/19/2022

#### Trade name: O-Phosphoric acid 85%

(Contd. of page 10) Freiburg +49 761 19240 https://www.uniklinik-freiburg.de/giftberatung.html Göttingen +49 551 19240 https://www.giz-nord.de/cms/index.php Homburg/Saar +49 6841 19240 http://www.uniklinikumsaarland.de/de/einrichtungen/ kliniken\_institute/kinder\_und\_jugendmedizin/ informations und behandlungszentrum fuer vergiftungen des saarlandes Mainz +49 6131 19240 http://www.giftinfo.uni-mainz.de/index.php?id=24807 München +49 89 19240 http://www.toxinfo.med.tum.de Greece Greek κέντρο δηλητηριάσεων +30 213 200 9000 http://www.aglaiakyriakou.gr/; http:/ /0317.syzefxis.gov.gr Hungary Hungarian Egészségügyi Toxikológiai Tájékoztató Szolgálat +36 6 80 20 11 99; +36 06 1 476 6464 http://www.okbi.hu/page.php?trid=1&dz=103 Italy Italian Bergamo +39 800 88 33 00 http://www.asst-pg23.it/section/259/Tossicologia -Centro antiveleni Firenze +39 55 794 78 19 http://www.antiveleni.altervista.org Milano +39 2 661 01 029 http://www.centroantiveleni.org Pavia +39 382 244 44 http://www-3.unipv.it/reumatologia-tossicologia/cav Napoli +39 81 747 28 70 Foggia +39 881 732 326 Roma +39 6 685 93 726 / +39 6 499 78 000 / +39 6 305 43 43http://www.corso-primo-soccorsoroma.it/centri antiveleno-lazio.html Ireland English Poisons information Centre of Ireland +353 1 809 21 66 http://www.poisons.ie/Public Latvia\* Latvian Saindēšanās informācijas centri +371 670 00 610 https://www.aslimnica.lv/lv Russian Латвия +371 67000610 https://www.aslimnica.lv/lv Lithuania Lithuanian Apsinuodijimų informacijos biuras + 370 5 236 20 52 http://www.apsinuodijau.lt Luxembourg German Giftinformationszentrum +49 800 255 00 http://www.poisoncentre.be French Centre antipoison +352 800 255 00 http://www.centreantipoisons.be · Date of preparation / last revision 12/27/2023 · Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organisation ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO) ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Skin Corrosion 1B: Skin corrosion/irritation - Category 1B (Contd. on page 12)

Page 11/12



Printing date 12/27/2023

Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

*Eye Damage 1: Serious eye damage/eye irritation – Category 1* • \* *Data compared to the previous version altered.*  (Contd. of page 11)

US

Page 12/12