

Page 1/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

### **SECTION 1: Identification**

- · 1.1 Product identifier
- · Trade name: O-Phosphoric acid 85%
- · Article number: 1616
- Application of the substance / the mixture

Chemical for research, development, manufacturing, laboratory chemical for analysis.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Biosolve Chimie

20 Rue Roger Husson, 57260 Dieuze, France Tel: +33 3 878 675 80/81/82/83/84/85 Email: info@biosolvechimie.com

Biosolve B.V.

Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.

*Tel:* +31-(0)40-2071300 *Fax:* +31-(0)40-2048537

Email: info@biosolve-chemicals.com

- · Information department: Product safety department.
- · 1.4 Emergency telephone number:

USA and CANADA

American Association of Poison Control Centers 1-800-222-1222.

Manitoba - Manitoba Poison Centre 1-855-7POISON (1-855-776-4766)

British Columbia BC Drug and Poison Information Centre (DPIC) 1-800-567-8911 (toll free in BC) (604) 682-5050 (Greater Vancouver or outside of BC)

Québec

Centre antipoison du Québec 1-800-463-5060

Nova Scotia, Prince Edward Island IWK Regional Poison Centre 1-800-565-8161 (within NS and PEI only) (902) 470-8161 (Halifax or outside NS, PEI)

Alberta, Saskatchewan, Northwest Territories Poison And Drug Information Services (PADIS) 1-800-332-1414 (toll free in Alberta, Northwest Territories) 1-866-454-1212 (toll free in Saskatchewan) (403) 944-1414 (in Calgary, outside of Alberta, or VOIP users)

Nunavut - Ontario Poison Centre 1-866-913-7897



Page 2/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 1)

For emergency telephone numbers of the poisons centers in USA please use this link: http://www.eapcct.org/

#### SECTION 2: Hazard(s) identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS05 Corrosion

Skin Corrosion 1B H314 Causes severe skin burns and eye damage.

Eye Damage 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labeling: phosphoric acid
- · Hazard statements

H314 Causes severe skin burns and eve damage.

· Precautionary statements

P260 Do not breathe dusts or mists. P264 Wash thoroughly after handling.

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

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/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.

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

regulations.

(Contd. on page 3)



Page 3/13

### Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 2)

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 3Fire = 0

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

#### Dangerous components:

CAS: 7664-38-2

Index number: 015-011-00-6 RTECS: TB 6300000

phosphoric acid

75-100%

#### SECTION 4: First-aid measures

- 4.1 Description of first aid measures
- · 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.

### **SECTION 5: Fire-fighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.

(Contd. on page 4)



Page 4/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 3)

· 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.

#### SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

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	$3 mg/m^3$
· PAC-2:	
CAS: 7664-38-2 phosphoric acid	$30 \text{ mg/m}^3$
· PAC-3:	
CAS: 7664-38-2 phosphoric acid	150 mg/m³

### **SECTION 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.

(Contd. on page 5)



Page 5/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 4)

· 7.3 Specific end use(s) No further relevant information available.

#### SECTION 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/m³

TLV Short-term value: 3 mg/m<sup>3</sup>

Long-term value: 1 mg/m³

- · 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.

· 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.

(Contd. on page 6)



Page 6/13

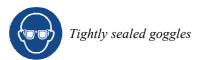
# Safety Data Sheet acc. to OSHA HCS

 Printing date 11/18/2025
 Version 5
 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

· Eye protection:

(Contd. of page 5)



9.1 Information on basic physical a General Information	nd chemical properties	
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:	Not applicable.	
Decomposition temperature:	No data available	
Ignition temperature:	Product is not selfigniting.	
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/cm³ (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/wat	'er): No data available	

(Contd. on page 7)



Page 7/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

		(Contd. of page 6
· Solvent content:		
Water:	15.0 %	
VOC content:	0.00 %	
	$0.0~\mathrm{g/l}$ / $0.00~\mathrm{lb/gl}$	
Solids content:	85.0 %	
· 9.2 Other information	No further relevant information available.	

### SECTION 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.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

#### SECTION 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.

- · Sensitization: Based on available data, the classification criteria are not met.
- Additional toxicological information:
- · 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.

(Contd. on page 8)



Page 8/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 7)

· 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.

### SECTION 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.
- · 12.6 Other adverse effects No further relevant information available.

### SECTION 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.

SECTION 14: Transport information		
· 14.1 UN-Number · DOT, ADR, IMDG, IATA	UN1805	
· 14.2 UN proper shipping name	0.11300	
· DOT	Phosphoric acid solution	
$\cdot ADR$	UN1805 Phosphoric acid solution	
· IMDG, IATA	PHOSPHORIC ACID, SOLUTION	

(Contd. on page 9)



Page 9/13

## Safety Data Sheet acc. to OSHA HCS

*Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022* 

Trade name: O-Phosphoric acid 85%

(Contd. of page 8) · 14.3 Transport hazard class(es)  $\cdot$  **DOT** · Class 8 Corrosive substances · Label  $\cdot$  ADR 8 (C1) Corrosive substances · Class · Label · IMDG, IATA · Class 8 Corrosive substances · Label · 14.4 Packing group · DOT, ADR, IMDG, IATA III· 14.5 Environmental hazards: · Marine pollutant: No14.6 Special precautions for user Warning: Corrosive substances · Hazard identification number (Kemler code): 80 F-A,S-B· EMS Number: · Segregation groups Acids · Stowage Category A· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

(Contd. on page 10)



Page 10/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

5L

Trade name: O-Phosphoric acid 85%

(Contd. of page 9)

 $\cdot$  IMDG

· Limited quantities (LQ)

· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

SECTION 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.

· 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.

US



Page 11/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 10)

#### SECTION 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 Vergiftungsinformationszentrale (VIZ) (+43) 1 406 43 43

Belgium Centre Antipoisons (+32) 070 245 245 Antigifcentrum 070 245 245 (+32)

Bulgaria Национален токсикологичен информационен център Многопрофилна болница за активно лечение и спешна медицина "Н.И.Пирогов" (+359) 2 9154 233

Croatia Centar za kontrolu otrovanja (+385) 01 2348 342

Cyprus Υπουργείο Εργασίας, Πρόνοιας και Κοινωνικών Ασφαλίσεων Τμήμα Επιθεώρησης Εργασίας 1401

Czech Republic Toxikologické informační středisko (+420) 224 919 293, +(420) 224 915 402

Denmark Giftlinjen: +45 8212 1212

Estonia Terviseameti mürgistusteabekeskuse 16662, (+372) 7943 794

Finland Myrkytystietokeskus 0800 147 111, 09 471 977

France ORFILA (INRS) : + 33 (0)1 45 42 59 59 Centres Antipoison et de Toxicovigilance

ANGERS: 02 41 48 21 21 BORDEAUX: 05 56 96 40 80 LILLE: 0800 59 59 59 LYON: 04 72 11 69 11 MARSEILLE: 04 91 75 25 25

NANCY: 03 83 22 50 50 PARIS: 01 40 05 48 48 STRASROURG: 03 88 37 37

STRASBOURG: 03 88 37 37 37 TOULOUSE: 05 61 77 74 47

Germany Giftnotruf der Charité, Berlin: 030/19240

Giftinformationszentrum-Nord der Länder Bremen, Hamburg, Niedersachsen und Schleswig-Holstein (GIZ-Nord) :0551/19 240

Informationszentrale gegen Vergiftungen Zentrum für Kinderheilkunde Universitätsklinikum Bonn: 0228/19240

Giftnotruf Erfurt Gemeinsames Giftinformationszentrum der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen: 0361/730 730

Informations- und Beratungszentrum für Vergiftungsfälle Klinik für Kinder- und Jugendmedizin Universitätsklinikum des Saarlandes: 06841/19240

(Contd. on page 12)



Page 12/13

## Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 11)

Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen - Klinische Toxikologie -Universitätsmedizin der Johannes Gutenberg-Universität Mainz: 06131/19240

Vergiftungs-Informations-Zentrale Zentrum für Kinder- und Jugendmedizin Universitätsklinikum: 0761/19240

Giftnotruf München Toxikologische Abteilung der II. Med. Klinik und Poliklinik: 089/19240

Great Britain Members of the public seeking specific information on poisons should contact: In England and Wales: NHS 111 - dial 111 In Scotland: NHS 24 - dial 111

Greece Κέντρο Δηλητηριάσεων (+30) 2107793777

Hungary Országos Kémiai Biztonsági Intézet (OKBI) +(36)-80-201-199

Iceland LANDSPITALI - THE NATIONAL UNIVERSITY HOSPITAL Tel. (+354) 543 1000

Ireland National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

Italy Istituto Superiore di Sanità (ISS) +390649906140

CAV "Ospedale Pediatrico Bambino Gesù" – Roma Tel. (+39) 06.6859.3726

CAV "Azienda Ospedaliera Università di Foggia" – Foggia Tel. 800.183.459

CAV "Azienda Ospedaliera A. Cardarelli" – Napoli Tel. (+39) 081.545.3333

CAV Policlinico "Umberto I" – Roma Tel. (+39) 06.4997.8000

CAV Policlinico "A. Gemelli" – Roma Tel. (+39) 06.305.4343

CAV Azienda Ospedaliera "Careggi" U.O. Tossicologia Medica – Firenze Tel. (+39) 055.794.7819

CAV Centro Nazionale di Informazione Tossicologica – Pavia Tel. (+39) 0382.24.444

CAV Ospedale Niguarda - Milano Tel. (+39) 02.66.1010.29

CAV Azienda Ospedaliera Papa Giovanni XXIII – Bergamo Tel. 800.88.33.00

CAV Centro antiveleni Veneto – Verona Tel. 800.011.858

Latvia Latvijas Vides, ģeoloģijas un meteoroloģijas centrs (+371) 67032600

Lithuania Apsinuodijimų informacijos biuras +370 (5) 2362052

Luxembourg Antigifcentrum / Centre antipoisons (+352) 8002 5500

The Netherlands Nationaal Vergiftigingen Informatie +31 (0)88 755 8000

- · Date of preparation / last revision 11/18/2025 / 4
- · 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

(Contd. on page 13)



Page 13/13

### Safety Data Sheet acc. to OSHA HCS

Printing date 11/18/2025 Version 5 Reviewed on 10/19/2022

Trade name: O-Phosphoric acid 85%

(Contd. of page 12)

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 Eye Damage 1: Serious eye damage/eye irritation - Category 1

\* Data compared to the previous version altered.