Ortho-Phosphoric acid

Safety Data Sheet

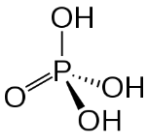
according to Regulation (EU) 2015/830

Date of issue: 8/12/2016

Doc No: SDS-959.062/0

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

1.1. Product identifier

Product form	:	Substance
Substance name	:	Phosphoric acid
EC index no	:	015-011-00-6
EC no	:	231-633-2
CAS No	:	7664-38-2;7664-38-2
Type of product	:	Solution,Group
Formula	:	H3PO4
Chemical structure	:	
Synonyms	:	orthophosphoric acid, conc>=25%, aqueous solutions / phosphoric acid / Phosphoric acid, solution / phosphoric acid, technical, conc>=25%, aqueous solutions

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemical

Chemical intermediate
Food industry: additive
Petrochemistry:
Catalyst: auxiliary substance
Pharmaceutical product: component
Waste materials

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ISOLAB GmbH
Bahnhofstrasse 10, D-97877
Wertheim - Germany
T +49 93 42 912 355 - F +49 93 42 912 357
prodsafe@isolab.de

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Germany	Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG	Hindenburgdamm 30 12203 Berlin	+49 30 19240	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1B H314

Full text of hazard classes and H-statements : see section 16

Specific concentration limits:

(10 =<C < 25) Skin Irrit. 2, H315
(10 =<C < 25) Eye Irrit. 2, H319
(C >= 25) Skin Corr. 1B, H314

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection, face protection, protective clothing
P264 - Wash hands thoroughly after handling
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P363 - Wash contaminated clothing before reuse
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P405 - Store locked up

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Phosphoric acid	(CAS No) 7664-38-2;7664-38-2 (EC no) 231-633-2 (EC index no) 015-011-00-6	30 - 96

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact : Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist.

First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Call Poison Information Centre (www.big.be/antigif.htm). Immediately consult a doctor/medical service. Take the container/vomit to the doctor/hospital. Ingestion of large quantities: immediately to hospital. Do not give chemical antidote.

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

Symptoms/injuries after inhalation : Coughing. Dry/sore throat. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. FOLLOWING SYMPTOMS MAY APPEAR LATER: Respiratory difficulties. Risk of lung oedema.

Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.

Symptoms/injuries after eye contact : Corrosion of the eye tissue.

Symptoms/injuries after ingestion : Burns to the gastric/intestinal mucosa. Nausea. Abdominal pain. Blood in vomit. AFTER ABSORPTION OF HIGH QUANTITIES: Shock.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Red skin.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Adapt extinguishing media to the environment.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Corrosion-proof suit. Large spills/in enclosed spaces: compressed air apparatus. Large spills/in enclosed spaces: gas-tight suit. See "Material-Handling" to select protective clothing.

Emergency procedures : Mark the danger area. No naked flames. Wash contaminated clothes. Large spills/in confined spaces: consider evacuation. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Hazardous reaction: measure explosive gas-air mixture. Reaction: dilute combustible gas/vapour with water curtain. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: sand. Scoop absorbed substance into closing containers. See "Material-handling" for suitable container materials. Carefully collect the spill/leftovers. Leftovers: neutralize with sodium bicarbonate. Damaged/cooled tanks must be emptied. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: many substances. oxidizing agents. reducing agents. (strong) bases. metals.

Storage area	:	Keep container in a well-ventilated place. Keep locked up. Provide for a tub to collect spills. Meet the legal requirements.
Special rules on packaging	:	SPECIAL REQUIREMENTS: closing. corrosion-proof. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.
Packaging materials	:	SUITABLE MATERIAL: stainless steel. polyethylene. glass. MATERIAL TO AVOID: steel. aluminium. iron.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phosphoric acid (7664-38-2;7664-38-2)		
EU	Local name	Orthophosphoric acid
EU	IOELV TWA (mg/m³)	1 mg/m³
EU	IOELV STEL (mg/m³)	2 mg/m³
Austria	Local name	Phosphorsäure
Austria	MAK (mg/m³)	1 mg/m³
Austria	MAK Short time value (mg/m³)	2 mg/m³
Belgium	Local name	Acide phosphorique
Belgium	Limit value (mg/m³)	1 mg/m³
Belgium	Short time value (mg/m³)	2 mg/m³
Bulgaria	Local name	Ортофосфорна киселина
Bulgaria	OEL TWA (mg/m³)	1 mg/m³
Bulgaria	OEL STEL (mg/m³)	2 mg/m³
Bulgaria	Notes	• (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Croatia	Local name	fosforna kiselina; (Ortofosforna)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	1 mg/m³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	2 mg/m³
Croatia	Naznake (HR)	C (nagrizajuće); EU* (naznaka da se radi o tvarima za koje su utvrđene indikativne granične vrijednosti izloženosti prema Direktivi 2000/39/ EC (prva lista))
Czech Republic	Local name	Kyselina fosfore ná
Czech Republic	Expoziční limity (PEL) (mg/m³)	1 mg/m³
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	2 mg/m³
Denmark	Local name	Phosphorsyre
Denmark	Grænseværdie (langvarig) (mg/m³)	1 mg/m³ 1 mg/m³
Denmark	Anmærkninger (DK)	E (betyder, at stoffet har en EF-grænseværdi)
Estonia	Local name	Fosforhape, (ortofosforhape) aur
Estonia	OEL TWA (mg/m³)	1 mg/m³
Estonia	OEL STEL (mg/m³)	2 mg/m³
Finland	Local name	Fosforihappo
Finland	HTP-arvo (8h) (mg/m³)	1 mg/m³
Finland	HTP-arvo (15 min)	2 mg/m³
France	Local name	Acide phosphorique
France	VME (mg/m³)	1 mg/m³
France	VME (ppm)	0.2 ppm
France	KZGW (mg/m³)	2 mg/m³
France	KZGW (ppm)	0.5 ppm
France	Note (FR)	Valeurs règlementaires indicatives
Germany	Local name	Orthophosphorsäure
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	2 mg/m³ E (mg/m3)

Phosphoric acid (7664-38-2;7664-38-2)		
Germany	Remark (TRGS 900)	DFG,EU,AGS,Y
Gibraltar	Eight hours mg/m3	1 mg/m³
Gibraltar	Short-term mg/m3	2 mg/m³
Gibraltar	Name of agent	Orthophosphoric acid
Greece	OEL TWA (mg/m³)	1 mg/m³
Greece	OEL STEL (mg/m³)	3 mg/m³
Hungary	Local name	ORTOFOSZFORSAV
Hungary	AK-érték	1 mg/m³
Hungary	CK-érték	2 mg/m³
Hungary	Megjegyzések (HU)	m; EU1
Ireland	Local name	Orthophosphoric acid
Ireland	OEL (8 hours ref) (mg/m³)	1 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	2 mg/m³
Ireland	Notes (IE)	IOELV
Italy	Local name	Acido ortofosforico
Italy	OEL TWA (mg/m³)	1 mg/m³
Italy	OEL STEL (mg/m³)	2 mg/m³
Latvia	Local name	Fosforskābe (ortofosforskābe)
Latvia	OEL TWA (mg/m³)	1 mg/m³
Latvia	OEL STEL (mg/m³)	2 mg/m³
Lithuania	Local name	Fosforo rūgštis, orto-
Lithuania	IPRV (mg/m³)	1 mg/m³
Lithuania	TPRV (mg/m³)	2 mg/m³
Luxembourg	Local name	Acide phosphorique
Luxembourg	OEL TWA (mg/m³)	1 mg/m³
Luxembourg	OEL STEL (mg/m³)	2 mg/m³
Malta	Local name	Orthophosphoric acid
Malta	OEL TWA (mg/m³)	1 mg/m³
Malta	OEL STEL (mg/m³)	2 mg/m³
Netherlands	Local name	Fosforzuur
Netherlands	Grenswaarde TGG 8H (mg/m³)	1 mg/m³
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	2 mg/m³
Poland	Local name	Kwas fosforowy(V)
Poland	NDS (mg/m³)	1 mg/m³
Poland	NDSCh (mg/m³)	2 mg/m³
Portugal	Local name	Ácido fosfórico
Portugal	OEL TWA (mg/m³)	1 mg/m³
Portugal	OEL - Ceilings (mg/m³)	3 mg/m³
Romania	Local name	Acid ortofosforic
Romania	OEL TWA (mg/m³)	1 mg/m³
Romania	OEL STEL (mg/m³)	2 mg/m³
Slovenia	Local name	fosforjeva kislina
Slovenia	OEL TWA (mg/m³)	1 mg/m³
Slovenia	OEL STEL (mg/m³)	2 mg/m³
Spain	Local name	Ácido ortofosfórico
Spain	VLA-ED (mg/m³)	1 mg/m³
Spain	VLA-EC (mg/m³)	2 mg/m³

Phosphoric acid (7664-38-2;7664-38-2)		
Spain	Notes	VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo. Todos estos agentes químicos figuran al menos en una de las directivas de valores límite indicativos publicadas hasta ahora (ver Anexo C. Bibliografía). Los estados miembros disponen de un tiempo fijado en dichas directivas para su transposición a los valores límites de cada país miembro. Una vez adoptados, estos valores tienen la misma validez que el resto de los valores adoptados por el país), s (Esta sustancia tiene prohibida total o parcialmente su comercialización y uso como fitosanitario y/o como biocida. Para una información detallada acerca de las prohibiciones consúltese: Base de datos de productos biocidas: http://www.msssi.gob.es/ciudadanos/productos.do?tipo=plaguicidas Base de datos de productos fitosanitarios http://www.magrama.gob.es/agricultura/pags/fitos/registro/fichas/pdf/Lista_sa.pdf).
Sweden	Local name	Fosforsyra
Sweden	nivågränsvärde (NVG) (mg/m³)	1 mg/m³
Sweden	kortidsvärde (KTV) (mg/m³)	2 mg/m³
United Kingdom	Local name	Orthophosphoric acid
United Kingdom	WEL TWA (mg/m³)	1 mg/m³
United Kingdom	WEL STEL (mg/m³)	2 mg/m³
Iceland	Local name	Fosfórsýra
Iceland	OEL (8 hours ref) (mg/m³)	1 mg/m³
Iceland	OEL (15 min ref) (mg/m3)	2 mg/m³
Norway	Local name	Fosforsyre
Norway	Grenseverdier (AN) (mg/m³)	1 mg/m³
Norway	Merknader (NO)	E (EU har en veiledende grenseverdi for stoffet)
Switzerland	Local name	Phosphorsäure
Switzerland	VME (mg/m³)	1 mg/m³
Switzerland	KZGW (mg/m³)	2 mg/m³
Switzerland	Remark (CH)	SS_C - OAW, Auge & Haut, Lunge$^{KT\ AN}$ - NIOSH, OSHA
Turkey	Local name	Ortofosforik asit
Turkey	OEL TWA (mg/m³)	1 mg/m³
Turkey	OEL STEL (mg/m³)	2 mg/m³
Australia	Local name	Phosphoric acid
Australia	TWA (mg/m³)	1 mg/m³ Synonym (Orthophosphoric acid)
USA - ACGIH	Local name	Phosphoric acid
USA - ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
USA - ACGIH	ACGIH STEL (mg/m³)	3 mg/m³
USA - ACGIH	Remark (ACGIH)	URT, eye, & skin irr
USA - OSHA	Local name	Phosphoric acid
USA - OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³

8.2. Exposure controls

Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: butyl rubber. natural rubber. neoprene. nitrile rubber. polyethylene. PVC. viton. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: PVA

Hand protection:

Gloves

Eye protection:

Face shield

Skin and body protection:

Corrosion-proof clothing

Respiratory protection:

Gas mask with filter type B. High vapour/gas concentration: self-contained respirator

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Molecular mass	:	98 g/mol
Colour	:	Colourless.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	1 (1 g/l, H_2O, 20 °C)
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	101 - 158 °C
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapour pressure	:	2 - 23 hPa (20 °C)
Relative vapour density at 20 °C	:	No data available
Relative density	:	1.2 - 1.7
Solubility	:	Soluble in water. Soluble in ethanol. Water: Complete
Log Pow	:	No data available
Viscosity, kinematic	:	28 mm2/s (20 °C)
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

Minimum ignition energy	:	Not applicable
VOC content	:	0 %
Other properties	:	Clear. Physical properties depending on the concentration. Substance has acid reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

Concentrated solution reacts exothermically with water (moisture). Decomposes on exposure to temperature rise: release of toxic and corrosive gases/vapours (phosphorus oxides). Violent exothermic reaction with (some) bases. Reacts with many compounds e.g.: with (strong) oxidizers and with (strong) reducers: (increased) risk of fire/explosion. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen). This reaction is accelerated on exposure to temperature rise.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Causes severe skin burns and eye damage.
Serious eye damage/irritation	:	Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Classification concerning the environment: not applicable.
Ecology - air	:	Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Air pollutant.
Ecology - water	:	Mild water pollutant (surface water). Slightly harmful to fishes. May cause eutrophication. Toxic to plankton. Slightly harmful to bacteria. Slightly harmful to aquatic organisms. pH shift.

12.2. Persistence and degradability

Phosphoric acid (7664-38-2;7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Phosphoric acid (7664-38-2;7664-38-2)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	:	Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Remove for physico-chemical/biological treatment. Remove to an authorized dump (Class I).
Additional information	:	LWCA (the Netherlands): KGA category 01. Hazardous waste according to Directive 2008/98/EC.

European List of Waste (LoW) code : 06 01 04* - phosphoric and phosphorous acid

SECTION 14: Transport information

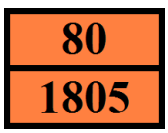
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1805	1805	1805	1805	1805
14.2. UN proper shipping name				
PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID SOLUTION	Phosphoric acid, solution	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
Transport document description				
UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III, (E)	UN 1805 PHOSPHORIC ACID SOLUTION, 8, III	UN 1805 Phosphoric acid, solution, 8, III	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III	UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : C1
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : 2R

- Transport by sea

Transport regulations (IMDG) : Subject
Special provisions (IMDG) : 223
Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Miscible in water. Mildly corrosive to most metals.
MFAG-No	:	154

- Air transport

Transport regulations (IATA)	:	Subject to the provisions
PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	8L

- Inland waterway transport

Classification code (ADN)	:	C1
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

- Rail transport

Transport regulations (RID)	:	Subject
Classification code (RID)	:	C1
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12
Colis express (express parcels) (RID)	:	CE8
Hazard identification number (RID)	:	80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Phosphoric acid is not on the REACH Candidate List

Phosphoric acid is not on the REACH Annex XIV List

VOC content : 0 %

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 392)

WGK remark : Classification water polluting in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 2)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:	
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H314	Causes severe skin burns and eye damage

SDS ISOLAB

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product