



SAFETY DATA SHEET CS0014

**o-PHOSPHORIC ACID 9.5%
YELLOW/LEMON - CLEAN IT**

Place and date of issue:
Villaverla: 19.03.2019
ED. 4 - 14.10.2022
IT..... P.1
EN..... P.13
DE..... P.26
FR..... P.39
SV..... P.52

Section 1: Identification of the substance / mixture and of the Company

1.1 Identification of the product, substance or mixture

Product identifier 804031 - 804296 (TC41597)
Product name o-PHOSPHORIC ACID 9.5% Yellow/Lemon - CLEAN IT
INDEX number 015-011-00-6
EC number 231-633-2
CAS number 7664-38-2
Registration number 01-2119485924-24-XXXX

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

Description/Use: Laboratory reagent

1.3 Details of the supplier of the safety data sheet

Supplier TELWIN SPA
Street address Via della Tecnica, 3
Country 36030 VILLAVERLA (VI)
Telephone number +39 0445 858811
Fax +39 0445 858800
e-mail address telwin@telwin.com

1.4 Emergency telephone number

+39 0445 858811 (working hours)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

The product is not classified as hazardous under the provisions of Regulation (EC) 1272/2008 (CLP).
The product, however, containing hazardous substances in such concentration as to be declared in Section No. 3, requires a safety data sheet with appropriate information, in accordance with Regulation (EU) 2020/878.
Classification and hazard statements: --

2.2 Label elements

Hazard labelling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adaptations.
Hazard pictograms: --
Warnings: --
Hazard statements: **EUH210** Safety Data Sheet available on request.
Safety advice: --

2.3 Other hazards

Based on data available, the product does not contain PBT or vPvB substances at levels in excess of 0.1%.

Section 3: Composition/information on ingredients

3.1 Substances

Information not relevant.

3.2 Mixtures

Contains:

Identification conc% Classification 1272/2008 (CLP).

PHOSPHORIC ACID ... %

CAS 7664-38-2	9 - <10	Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI of the Regulation. CLP: B
CE 231-633-2		Skin Corr. 1B H314: ≥ 25%, Skin Irrit. 2 H315: ≥ 10%, Eye Dam.1 H318: ≥25%, Eye Irrit. 2 H319: ≥ 10%
INDEX 015-011-00-6		STA Oral: 500 mg/kg

Reg. REACH 01-2119485924-24-XXXX

PICRIC ACID

CAS. 88-89-1	<0,01	Expl. 1.1 H201, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331
CE. 201-865-9		
INDEX. 609-009-00-X		

NB: Value over range excluded.

The complete text of the hazard statements (H) is outlined in section 16 of the data sheet.



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Section 4: First aid measures

4.1 Description of first aid measures

No episodes of damage to staff responsible for product use have been reported. If necessary, implement the following measures:

INHALATION: Remove casualty to fresh air. If breathing stops, practice artificial respiration. Immediately contact a doctor.

INGESTION: Immediately contact a doctor. Induce vomiting only on doctor's orders. Never give anything by mouth to an unconscious person.

EYES and SKIN: Rinse with plenty of water. If irritation persists, consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

No episodes of damage to health ascribable to the product have been reported.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available.

Section 5: Firefighting measures

5.1 Extinguishing media

SUITABLE EXTINGUISHING MEDIA

Suitable extinguishing media are: carbon dioxide and chemical powder. For product leaks and spillages which have not caught fire, misted water can be used to disperse the flammable vapours and protect the people involved to stop the leak.

UNSUITABLE EXTINGUISHING MEDIA

Do not use water jets.

Water is not efficient to extinguish fire, however it can be used to cool closed containers exposed to flames, preventing bursting and explosions.

5.2 Special hazards arising from the substance or mixture

HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE

Avoid breathing in inflamed products.

PHOSPHORIC ACID ... %

If possible, distance the containers of the substances from the location of the fire or cool, since if exposed to radiant heat or if directly involved, toxic fumes can generate.

If possible, distance the containers of the substance from the location of the fire or cool, since if in contact with metals and exposed to radiant heat the substance releases flammable gases.

PICRIC ACID

Carbon oxides, nitric oxides.

5.3 Advice for firefighters

Cool containers with jets of water to prevent decomposition of the product and the development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect firefighting water that must not be discharged into the sewers. Dispose of contaminated water used for extinguishing and fire residue according to applicable regulations.

EQUIPMENT

Normal fire-fighting clothing, such as an open-circuit self-contained compressed-air breathing apparatus (EN 137), flame-resistant suit (EN469), gloves flame-resistant (EN 659) and firefighting boots (HO A29 or A30).

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Stop the leak if not in danger.

Wear adequate personal protective equipment (including personal protective equipment pursuant to section 8 of the safety data sheet) to prevent contaminating the skin, eyes and personal clothing. These indications apply both to workers and emergency intervention operators.

6.2 Environmental precautions

Prevent the product penetrating sewers, surface water and groundwater.



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6.3 Methods and material for containment and cleaning up

Soak up spills in a suitable container. Assess compatibility of the container to use with the product, checking section 10. Absorb the remainder with absorbent inert material. Ensure sufficient ventilation of the location of the spill. Disposal of contaminated material must be carried out in compliance with provisions in point 13.

6.4 Reference to other sections

Possible information on individual protection and disposal are outlined in sections 8 and 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle the product having firstly consulted all the sections of this safety data sheet. Avoid dispersion of the product in the environment. Do not eat, drink or smoke during use. Separate work clothing from normal clothing.

7.2 Conditions for safe storage, including any incompatibilities

Only store in the original container. Keep the containers closed, in a well-ventilated area, away from direct sunlight. Keep the containers far from any incompatible materials, checking section 10. Below is information on the German storage class for the product (according to German standard TRGS 510 "Storage of Hazardous Substances in Non-Stationary Containers"), as prescribed by German Technical Standard TRGS 220 "National Provisions in SDS Compilation"). The product is not classified as hazardous under Reg. (EC) 1272/2008. Based on the classification criteria defined in Annex 4 to TRGS510, the product is classified as:

Non-combustible corrosive substances Storage Class 8b

Shared storage is allowed for the product according to the criteria given in Table 2 of Chapter 7.2 of TRGS 510.

7.3 Specific end use(s).

Information not available.

Section 8: Exposure controls/personal protection

8.1 Parametri di controllo

Riferimenti Normativi:

ITA Italy Legislative Decree 9 April 2008, n.81

EU OEL EU Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398;

Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive

2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

TLV-ACGIH ACGIH 2021

ACIDO FOSFORICO, ... % Threshold limit value						
Type	State	TWA/8h		STEL/15min		Note
		Mg/M3	ppm	Mg/M3	ppm	
VLEP	ITA	1		2		
OEL	EU	1		2		
TLV		1		3		URT, eye, & skin irr

Health - Derived No Effect Level - DNEL / DMEL								
way of exposure	Effects on consumers				Effects on workers			
	Local acute	Acute systemic	local cronic	cronic systemic	Local acute	Acute systemic	local cronic	cronic systemic
oral				0,1 mg/kg bw/d				
inalation			0,36 mg/m3	4,57 mg/m3	2 mg/m3		1 mg/m3	10,7 mg/m3
dermal								



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PYCRIC ACID, ... % Threshold limit value						
Tipo	Stato	TWA/8h		STEL/15min		Note
		Mg/M3	ppm	Mg/M3	ppm	
OEL	EU	0,1		2		Proposed value limit
TLV--ACGIH		0,1		3		drmt, irrt oclr, sen cute

Legend:

C) = CEILING; INHALAB = Inhalable Fraction; BREATH = Breathable Fraction; TORAC = Thoracic Fraction

VND = identified hazard but no DNEL/PNEC available ; NEA = no expected exposure ; NPI = no identified hazard.
PHOSPHORIC ACID ...%.

Sampling method: http://amcaw.ifa.dguv.de/substance/methoden/094-phosphoric_acid_2016.pdf.

8.2 Exposure controls

The product is not classified as hazardous under the provisions of Annex I, Part 3 of Reg. (EC) 1272/2008 (CLP) and as such would not would require specific measures to control exposure. However, for precautionary purposes, the following measures are provided.

Considering use of adequate technical measures should always have priority over personal protective equipment, ensure good ventilation of the workplace using efficient local extraction system. Personal protective equipment must be CE marked to certify its compliance with standards in force.

HAND PROTECTION: In the event of prolonged contact with the product, you are advised to protect hands with work gloves that resist penetration (ref. standard EN 374).

For the definitive choice of material in the work gloves, you must also access the use process of the product and any further derivative products. Remember that latex gloves can cause irritation.

SKIN PROTECTION: Wear work gear with long sleeves and safety footwear for professional use, category I (ref. Regulation (UE) rif. Directive 89/686/CEE e norm EN ISO20344). Wash with soap and water having removed protective clothing.

EYE PROTECTION: You are advised to wear sealed protective goggles (ref. standard EN 166).

RESPIRATORY PROTECTION: In the event a threshold value is exceeded (e.g. TLV-TWA) of the substance or one or more of the substances in the product, you are advised to wear a mask with filter type B whose class (1, 2 or 3) should be chosen in relation to the use limit concentration. (ref. standard EN 14387). If gas or vapours are present of a different nature and/or gas or vapours with particles (aerosols, fumes, mist, etc.), you need to use combined filters.

Use of protective equipment for the airways is necessary in the event the technical measures implemented are not sufficient to limit workers' exposure to the threshold values taken into consideration. The protection offered by the masks is however limited. If the substance considered is odourless or its odour threshold is higher than the relevant TLV-TWA and in the event of an emergency, wear an open circuit, compressed air breathing apparatus (ref. standard EN 137) or an external air supply breathing apparatus (ref. standard EN 138). To correctly choose the airways protection equipment, refer to standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS.

Production process emissions, including those from ventilation devices should be checked to ensure compliance with environmental protection legislation.



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Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties environmental protection legislation.

PROPERTIES	VALUE
Physical state	Liquid
Colour	Yellow
Odour	Lemon characteristics
Odour threshold	Not available
pH	<0,5 (solut.100 g/l)
Start boiling point	>100C°
Melting point/freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not applicable
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Lower flammability limit	Not applicable
Upper flammability limit	Not applicable
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Relative density	Not available
Solubility	In water
Partition coefficient: n-octanol/ water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2 Other information

9.2.1. Information regarding classes of physical hazards

Information not available

9.2.2. Other safety characteristics

Explosive properties not applicable

Oxidizing properties not applicable



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Section 10: Stability and reactivity

In the absence of information on the mixture, literature information on the components is given. This information is not characteristic of the solution but of the hazardous components.

10.1 Reactivity

There are no particular reaction hazards with other substances in normal use conditions.

PHOSPHORIC ACID: decomposes at temperatures over 200°C

The substance decomposes on contact with alcohol, aldehydes, cyanides, ketones, phenols, esters, sulphides and halogenated organic compounds, producing toxic fumes.

10.2 Chemical stability

The product is stable in normal use and storage conditions.

PHOSPHORIC ACID: The product is stable in normal use and storage conditions.

The substance violently polymerises under the influence of azo compounds and epoxides.

10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal use and storage conditions.

PHOSPHORIC ACID: risk of explosion due to contact with nitromethane. It can react dangerously with alkali and Sodium borohydride.

10.4 Conditions to avoid

None in particular. However, comply with the usual precautions for chemical products.

PHOSPHORIC ACID: Ignition sources. However, comply with the usual precautions for chemical products.

PICRIC ACID.

Picric acid forms salts with numerous metals, many of which are quite sensitive to heat, friction or shock, e.g., lead, iron, zinc, nickel, copper. Therefore, the above data should be considered extremely sensitive and dangerous. In general, data derived from the reaction with ammonia and amines, as well as molecular complexes formed with aromatic hydrocarbons, etc., are not as sensitive. Contact of picric acid with concrete surfaces can generate friction-sensitive calcium salt. Anhydrous mixtures of picric acid and aluminum powder are inert, however, addition of water generates ignition after an induction period that depends on the amount added.

Storage standards: record the purchase date of each container. Product with a purchase date that is older than two years must be discarded. Check the water level every six months and add as needed. Rotate the containers every three months in order to distribute the water contained.

Avoid exposing the substance to heat, flames and sparks.

10.5 Incompatible materials

PHOSPHORIC ACID: Metals, strong alkalis, aldehydes, sulphides and peroxides.

PICRIC ACID: Strong bases, reducing agents, heavy metals, heavy metal salts, ammonia.

10.6 Hazardous decomposition products

PHOSPHORIC ACID: phosphorous oxide.

Section 11: Toxicological information

In the absence of test toxicology data on the product itself, the possible hazards to health of the product were evaluated based on the chemical properties contained, according to the reference legislation outlined for the classification.

Therefore consider the concentration of individual hazardous substances possibly mentioned in sect. 3 to evaluate the toxicological effects deriving from exposure to the product.

11.1. Information on hazard classes defined in Regulation (EC) no. 1272/2008

Metabolism, kinetics, action mechanism and other information

PHOSPHORIC ACID ...%

Phosphoric acid can penetrate the body through inhalation of its aerosols and through ingestion. Free phosphate ions which are eliminated with urine. The phosphoric acid particles are hygroscopic and tend to increase in volume when passing through the airways. They contain 90% humidity in the trachea and 99% in the lungs. Phosphoric acid in contact with humidity in the gastrointestinal tract



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is transformed into phosphate ions. Absorption and, in limited quantity, re-absorption in the gastrointestinal tract are influenced by various factors. Transport to the blood is an active phenomena which is stimulated by vitamin D. In an adult male, 2/3 of the quantity ingested is absorbed and eliminated in urine. In children, the quantity absorbed is not completely eliminated. As a result, the plasma rate remains higher than that of an adult. (INRS, 2011).

Information on likely routes of exposure

PHOSPHORIC ACID ...%

The main, potential exposure routes foreseeable can be skin contact and inhalation by workers exposed to production and use of the substance.

Immediate effects, delayed and chronic effects deriving from short and long term exposures

PHOSPHORIC ACID ...%

Exposure of the airways to vapours or aerosols causes immediate signs of irritation of the airways: runny nose, sneezing, sensation of nasal and pharyngeal burning, cough, dyspnea and chest pain. The prognosis can be poor in the event of developing laryngeal oedema or bronchospasm.

At the end of exposure, you usually have remission of symptoms, but within 48 hours delayed pulmonary oedema may develop. Complications include bacterial suprainfections. Hypersecretion and flaking of the bronchial mucous, in the presence of extensive injuries, are responsible for bronchial obstruction and atelectasis. Other possible sequellae are: spinal stenosis, bronchiectasis and pulmonary fibrosis. Ingestion of a concentrated solution of substance causes mouth pain, epigastric or chest discomfort, associated with hypersalivation and vomiting often containing blood. You have metabolic acidosis, hyperleukocytosis and haemolysis. Complications in the short term are oesophageal or gastric perforation, digestive haemorrhages, fistulas (esotracheal or aortic-esophageal), breathing difficulties (due to laryngeal oedema, pulmonary disease due to inhalation or esotracheal fistula), state of shock and disseminated intravascular coagulation. In the long term, digestive stenosis can develop, in particular oesophageal. There is also a risk of cancerization of the digestive tract injuries. No data are available for chronic exposure to substances.

PICRIC ACID

Picric acid dust causes dermatitis from sensitization that generally manifests on the face, especially around the mouth and sides of the nose; the pathology progresses from a simple oedema to final flaking, passing through the formation of papules and blisters. Inhalation of high dust concentrations causes unconsciousness, weakness, muscle pain and kidney problems. Ingestion of picric acid can cause a bitter taste, headache, light-headedness, nausea, vomiting and diarrhoea. High concentrations may cause erythrocyte destruction as well as kidney and liver lesions accompanied by hematuria.

Interactive effects

Data not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no relevant component)

ATE (Oral) of the mixture: >2000 mg/kg

ATE (Skin) of the mixture: Not classified (no relevant component)

PHOSPHORIC ACID ...%

ATE (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(data used to calculate the estimate of acute toxicity of the mixture)

Harmful if ingested.

Given a weight of evidence approach, the substance is classified in category 4 with LD50 estimated between 300 and 2000 mg/kg bw (OECD 423 - source: ECHA registration dossier)

PICRIC ACID

LD50 (Oral).120 mg/kg Rabbit

SKIN CORROSION / SKIN IRRITATION

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

The substance has a corrosive action. pH 0

The severity relates to the concentration of the solution, the quantity and the duration of contact. It can cause yellowish colouration of the skin. Based on the damage, hot and painful erythema, blisters or necrosis are observed. Evolution can complicate with suprainfection, aesthetic or functional sequellae.

On the rabbit's skin, the phosphoric acid causes irritation beginning with a concentration of 75% for 4 hours of contact; at 80%,



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irritation is severe, at 85%, è it is corrosive (necrosis) (INRS, 2011).

SERIOUS EYE DAMAGE / EYE IRRITATION

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

The substance has a corrosive action. pH 0

The severity relates to the concentration of the solution, the quantity and the duration of contact. The symptoms are: immediate pain, tearing, conjunctival hyperemia and often blepharospasms. Possible sequellae are: conjunctival adhesions, corneal opacity, cataract, glaucoma and also blindness.

In humans, ocular instillation of a drop of phosphoric acid solution buffered with pH 2.5 will cause slight itchiness without injury. A drop of the same solution buffered with pH 3.4 is perfectly tolerated (INRS, 2011).

In the rabbit's eye, a solution of 10-17% is slightly irritant, while direct contact with the pure solution (119 mg) causes serious effects (burns) (INRS, 2011).

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

Not classified. Corrosive. pH 0.

Respiratory sensitization

PHOSPHORIC ACID ...%

Inhalation of the substance can cause Brooks syndrome (asthma induced by irritants) (INRS, 2011).

Skin sensitisation

PHOSPHORIC ACID ...%

Phosphoric acid did not show sensitising power on a guinea pig (INRS, 2011).

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

Non-mutagenic. OECD 471/473/476

In vitro, it provided negative results in the Ames assay, with or without metabolic activation.

In vivo, a genetic recombination assay on *Drosophila* provided a negative result.

A dominant lethal assay, on rats, showed an increase in females the presented re-absorption after mating with males exposed to a very low concentration. (INRS, 2011)

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

Not classified.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

Reproductive toxicity: Not classified.

Harmful effects on sexual function and fertility

PHOSPHORIC ACID ...%

Fertility: NOAEL \geq 500 mg/kg bw/day, rat, OECD 422.

Harmful effects on offspring development



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PHOSPHORIC ACID ...%

Toxicity for development: NOAEL: \geq 410 mg/kg bw, rat, OECD 422.

Effects on breastfeeding or through breastfeeding

Data not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

Not classified

In humans, exposure of the airways to vapours or aerosols causes immediate signs of irritation of the airways: runny nose, sneezing, sensation of nasal and pharyngeal burning, cough, dyspnea and chest pain. The prognosis can be poor in the event of developing laryngeal oedema or bronchospasm. If exposure ceases, symptoms generally subside, but delayed pulmonary oedema can occur within 48 hours.

Bacterial superinfections are the most frequent complications. Bronchial hypersecretion and flaking of the bronchial mucous, in the presence of extensive injuries, are responsible for bronchial obstruction and atelectasis (INRS, 2011).

Ingestion of a concentrated solution of substance causes mouth pain, epigastric or chest discomfort, associated with hypersalivation and vomiting often containing blood. You have metabolic acidosis, hyperleukocytosis and haemolysis. Complications in the short term are oesophageal or gastric perforation, digestive haemorrhages, fistulas (esotracheal or aortic-esophageal), breathing difficulties (due to laryngeal oedema, pulmonary disease due to inhalation or esotracheal fistula), state of shock and disseminated intravascular coagulation (INRS, 2011).

Target organs

Data not available

Exposure routes

Data not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

Not classified

No data are available for humans following chronic exposure to the substance.

In humans, ingestion of phosphates can cause electrolyte imbalances in the body which, if excessive, can interfere with the function of a variety of organ systems. In particular, high consumption of phosphate can affect the distribution of calcium in the body and may in some cases produce calcification of soft tissues and affect bone formation. Kidney damage, calcification of soft tissues and bones were the main findings in laboratory animals fed repeatedly with phosphates (BIBRA, 1993).

The toxicity of phosphoric acid following repeated inhalation is similar to that of acid aerosols; the effect is due to the direct irritant action of the H⁺ ion and depends, not only on the concentration but also on the particle size and duration of exposure. In rats exposed to aerosols (0.49-0.65 μ m aerosol particles) of combustion products in a mixture containing red phosphorus consisting of 71 to 79% phosphoric acid, for 2.25 hours/day, 4 days/week for 13 weeks, lethality was observed from a concentration of 750 mg/m³ with effects on the respiratory tract and in particular on the terminal bronchioles. Rats exposed to white phosphorus combustion products, 15 minutes/day, 5 days/week for 13 weeks, die at high concentrations (589 to 1161 mg/m³) due to laryngeal or tracheal oedema (INRS, 2011) NOAEL (oral, rat, 90 days) 250 mg/kg of body weight/day OECD 422

Target organs

Data not available

Exposure routes

Data not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

PHOSPHORIC ACID ...%

No significant risk.

11.2. Information on hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with evaluated human health effects.



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Section 12: Ecological information

Use according to good working practices, avoiding release of the product in the environment. Notify the competent authorities if the product has reached waterways or it has contaminated the ground or vegetation.

12.1. Toxicity

PHOSPHORIC ACID ...%

CL50 fish 3 - 3.25 pH (96h) *Lepomis macrochirus*.

Phosphoric acid manifests ecotoxic potential when in the release environment pH is between 3 and 3.25.

EC50 – Shellfish > 100 mg/l/48h *Daphnia magna* (OECD 202)

EC50 - Algae / Aquatic Plants > 100 mg/l/72h *Desmodesmus subspicatus* (OECD 201)

NOEC Chronic Algae / Aquatic Plants 100 mg/l/72h *Desmodesmus subspicatus* (OECD 201)

PICRIC ACID

LC50 - Fish. 287 mg/l/96h

EC50 - Shellfish. 112mg/l/48h

EC50 - Algae / Aquatic Plants. 535 mg/l/72h

12.2. Persistence and degradability

PHOSPHORIC ACID ...%

Not relevant.

PICRIC ACID

COD: 0.92 g/g.

12.3. Bioaccumulative potential

PHOSPHORIC ACID ...%

Not relevant (inorganic substance).

12.4. Mobility in soil

Data not available

12.5. Results of the PBT and vPvB assessment

Based on data available, the product does not contain PBT or vPvB substances at a percentage \geq of 0.1%.

12.6. Endocrine system interference properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with evaluated environmental effects.

12.7. Other adverse effects

Data not available

Section 13: Disposal considerations

13.1 Waste treatment methods

Re-use, if possible. The product residue as such is considered non-hazardous special waste.

Disposal must be entrusted to a company authorised to manage waste, in compliance with national and, possible, local legislation.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recycling or disposal in compliance with national standards on waste management.

Section 14: Transport information

The product is not considered hazardous pursuant to provisions in force on transport of hazardous goods by road (A.D.R.) or rail (RID), by sea (IMDG Code) and by air (IATA).



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UN number : Not applicable.
UN proper shipping name: Not applicable.

14.3 Transport hazard classes:

ADR / RID: Class:8 Label 8
IMDG: Class:8 Label 8
IATA: Class:8 Label 8



14.4 Packaging group

ADR / RID, IMDG, IATA: III

14.5 Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6 Special precautions for user:

ADR / RID: HIN - Kemler: 80 Limited quantity: 5 L Restriction code in gallery: (E)
Special provisions: -

IMDG: EMS: F-A, S-B Limited quantity: 5 L
IATA: Cargo: Maximum quantity: 60 L Packaging instructions: 856
Pass.: Maximum quantity: 5 L Packaging instructions: 852
Particular instructions: A3, A803

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

Not relevant information

Section 15: Regulatory information

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

Seveso category - Directive 2012/18/EU: None

Restrictions on the product or substances contained according to Annex XVII Regulation (EC) 1907/2006

Contained substances

Item 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors.

Not applicable

Substances on Candidate List (Art. 59 REACH).

Based on available data, the product does not contain SVHC substances in a percentage $\geq 0.1\%$.

Substances subject to authorization (Annex XIV REACH): None

Substances subject to export notification requirements Regulation (EU) 649/2012: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None

Sanitary Controls: Information not available

WGK classification for product constituents (according to WGK rankings published on the website of the German Environmental Agency UBA (Umweltbundesamt):

-Phosphoric Acid, ... % WGK 1

-Picric Acid WGK 2

WGK classification for the product based on the calculation methods prescribed by AwAV:

For a concentration of constituent classified WGK1 (phosphoric acid, ...) $\geq 3\%$ and a classification of constituent classified WGK2 $< 0.2\%$, the product is classified as WGK 1.

15.2 Chemical safety assessment.

A chemical safety assessment was carried out for the following substances contained:

Phosphoric Acid,%



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Section 16: Other information

Expl. 1.1	Explosion, division 1.1
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 3	Acute toxicity, category 3
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage/eye irritation, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
H201	Explosive; mass explosion hazard
H290	Can be corrosive to metals.
H301	Toxic if ingested.
H311	Toxic for contact with skin.
H331	Toxic if inhaled
H314	Causes serious skin burns and serious eye injuries.
H318	Causes serious eye injuries.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
EUH210	Safety Data Sheet available on request.

LEGEND:

- ADR: European Agreement concerning the Carriage of Dangerous Goods by Road
- CAS NUMBER: Chemical Abstract Service number
- CE50: Concentration that affects 50% of the population subject to testing
- EC NUMBER: Identification number in ESIS (European Standardised Information Sheet)
- CLP: Regulation EC 1272/2008
- DNEL: Derived No-Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonised System for the classification and labelling of chemical products
- IATA DGR: Regulation for the carriage of dangerous goods by the International Air Transport Association
- IC50: Immobilisation concentration of 50% of the population subject to testing
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number of Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predicted exposure level
- PNEC: Predicted no-effect concentration
- REACH: Regulation EC 1907/2006
- RID: Regulation concerning the international carriage of dangerous goods by rail
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of work exposure.
- TWA STEL: Short term exposure limit
- TWA: Time weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent, very bioaccumulating according to REACH
- WGK: Water Endangerment Class (Germany).

GENERAL BIBLIOGRAPHY:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH).
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 2020/878 (All. II REACH Regulation)
4. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)



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10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)

- The Merck Index. - 10th Edition.

- Handling Chemical Safety

- INRS - Fiche Toxicologique (toxicological sheet)

- Patty - Industrial Hygiene and Toxicology

- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

- IFA GESTIS Website

- ECHA Agency Website

- Database of model SDSs of chemical substances - Ministry of Health and 'Istituto Superiore di Sanità'

Note for user:

The information in this sheet is based on the knowledge available to us as of the date of the latest version. The user should ensure of the suitability and completeness of the information in relation to the specific use of the product.

This document should not be construed as a guarantee of any specific properties of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe under his own responsibility the laws and regulations

in force regarding hygiene and safety. We assume no responsibility for improper use.

Provide adequate training for personnel involved in the use of chemicals.

CLASSIFICATION CALCULATION METHODS

Chemical Physical Hazards: The classification of the product was derived from the criteria set forth in CLP Regulation Annex I Part 2. The methods of assessment

of chemical physical properties are given in Section 9.

Health hazards: The classification of the product is based on the calculation methods in CLP Annex I Part 3, unless otherwise stated in section 11.

Environmental Hazards: The classification of the product shall be based on the calculation methods set out in Annex I of CLP Part 4, unless otherwise indicated in section 12.