



# PHOSPHORIC ACID 75%

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name:	Phosphoric Acid 75%
CAS Number:	7664-38-2
EC Number:	231-633-2

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

Product use: Laboratory chemicals, Industrial & for professional use only

### 1.3 Details of the supplier of the safety data sheet

<b>Company name:</b>	East Harbour Group Ltd Miranda House, The Quay Harwich, Essex, CO12 3HH United Kingdom
<b>Telephone:</b>	+44 (0) 333 242 0100
<b>Email:</b>	<a href="mailto:info@eastharbourgroup.com">info@eastharbourgroup.com</a>

### 1.4 Emergency telephone number

**Emergency telephone:** +44 (0) 333 242 0100 (U.K office hours only)

## Section 2: Hazardous identification

### 2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard Categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

May be corrosive to metals

Causes severe skin burns and eye damage

Causes serious eye damage

### 2.2 Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling: phosphoric acid; orthophosphoric acid...%

Signal word: Danger



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Pictograms:



Hazard Statements:

May be corrosive to metals  
Causes severe skin burns and eye damage

Precautionary Statements:

Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear protective gloves/protective clothing/eye protection/face protection  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and safe to do so. Continue rinsing.  
Immediately call a POISON CENTRE/doctor  
Dispose of contents/container in accordance with local/regional/national/international regulations.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

CAS #	Content (W/W)	Ingredients
7664-38-2	50-75%	Phosphoric acid, orthophosphoric acid

Chemical name: Phosphoric acid  
Common name / synonyms: Orthophosphoric acid

## Section 4: First aid measures

### 4.1 Description of first aid measures

In case of skin contact: After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, see medical treatment.  
In case of eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.  
If swallowed: Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.  
If inhaled: In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician. In the case of lung irritation: primary treatment using corticoid spray, e.g., Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks).

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

If swallowed danger of perforation of the oesophagus and the stomach (strong corrosive effects)



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

Treat symptomatically

## Section 5: Fire-fighting measures

### 5.1 Fire Fighting Media and Instructions:

Suitable extinguishing media: Sand, foam, carbon dioxide (CO<sub>2</sub>), extinguishing powder. In case of major fire and large quantities: water spray jet, water mist

Unsuitable extinguishing media: High power water jet

### 5.2 Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide, carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus. Collected contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

## Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment, and emergency procedures

Wear personal protection equipment. Do not breathe vapour/aerosol. Avoid contact with skin, eyes, and clothes.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g., by containment or oil barriers). Do not allow to enter into soil/subsoil.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g., sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered materials as prescribed in the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

Wear suitable protective clothing. Conditions to avoid: aerosol or mist formation. Avoid contact with skin, eyes, and clothes. Usual measures for fire protection.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product. Make sure spills can be contained (e.g., sump pallets or kerbed areas).

Do not store together with explosives, oxidising solids, oxidising liquids, organic peroxides, self-reactive substances and mixtures, radioactive substances, infectious substances. Recommended storage temperature: 20C. Protect against: frost, UV-radiation/sunlight, heat, humidity.

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## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

Substance	ppm	Mg/m3	Fibres/ml	Category	Origin
Orthophosphoric acid	-	1		TWA (8h)	WEL
	-	2		STEL (15 mins)	WEL

### 8.2. Exposure controls



Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation.  
When using do not eat, drink or smoke.

### 8.3 Personal protective equipment

**Eye/face protection:** Wear eye/face protection.

**Skin protection:** Suitable protective clothing: lab apron.

**Body/hand protection:** Wear suitable gloves.

#### Suitable materials:

FKM (fluororubber): Thickness of glove material: 0.4 mm

Breakthrough time  $\geq$  8h

Butyl rubber: Thickness of glove material: 0.5 mm

Breakthrough time  $\geq$  8h

CR (polychloroprenes, chloroprene rubber): Thickness of glove material: 0.5 mm

Breakthrough time  $\geq$  8h

NBR (Nitrile rubber): Thickness of glove material: 0.35 mm

Breakthrough time  $\geq$  8h

PVC (Polyvinyl chloride): Thickness of glove material: 0.5 mm

Breakthrough time  $\geq$  8h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness/permeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

**Respiratory protection:** With correct and proper use, and under normal conditions, breathing protection is not required.

#### Respiratory protection necessary at:

Exceeding exposure limit values

Insufficient ventilation and aerosol or mist formation.

Suitable respiratory protective equipment: particulates filter device (DIN EN 143) Type P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.



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## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Colourless
<b>Physical State</b>	Liquid
<b>Odor</b>	Characteristic
<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available
<b>Melting Point/Range</b>	No information available
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Explosion Limits</b>	No information available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	No information available
<b>Specific Gravity / Density</b>	No information available
<b>Bulk Density</b>	No information available
<b>Water Solubility</b>	Completely miscible
<b>Solubility in other solvents</b>	No information available
<b>Partition Coefficient</b>	No information available
<b>Auto-ignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available

## Section 10: Stability and Reactivity

<b>10.1 Reactivity</b>	No information available
<b>10.2 Chemical Stability</b>	The product is chemically stable under recommended conditions of storage, use and temperature
<b>10.3 Possibility of hazardous reactions</b>	Refer to 10.5
<b>10.4 Conditions to avoid</b>	UV-radiation/sunlight. Heat
<b>10.5 Incompatible materials</b>	Oxidising agents, strong. Reducing agents, strong
<b>10.6 Hazardous decomposition products</b>	Can be released in case of fire: carbon monoxide, carbon dioxide (CO <sub>2</sub> )

## Section 11: Toxicological Information

### 11.1 Toxicological effects:

No information available

### 11.2. Acute Toxicity:

Exposure route	Dose	Species	Source	Method
Oral	LD50 2600 mg/kg	Rat	ECHA Dossier	



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### 11.3. Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Irritation and corrosivity: Causes severe skin burn and eye damage. Causes serious eye damage.

Sensitising effects: Based on the available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction: Based on the available data, the classification criteria are not met.

STOT-single exposure: Based on the available data, the classification criteria are not met.

STOT-repeated exposure: Based on the available data, the classification criteria are not met.

Aspiration hazard: Based on the available data, the classification criteria are not met.

## Section 12: Ecological Information

### 12.1 Toxicity

Aquatic toxicity	Dose	(h) (d)	Species	Source	Method
Acute fish toxicity	LC50 138 mg/l	96 h	Gambusia affinis		
Acute algae toxicity	ErC50 >100 mg/l	72 h	Desmodesmus subspicatus	ECHA Dossier	
Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna	ECHA Dossier	

Persistence and degradability: The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential: No indication of bioaccumulative potential.

Mobility in soil: No information available

## Section 13: Disposal considerations

### 13.1 Waste treatment methods

#### Waste disposal of substance:

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of waste codes – residues/unused products:

060104: WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation supply and use of (MFSU) or acids; phosphoric and phosphorous acid; hazardous waste

List of waste codes – used product

060104: WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation supply and use of (MFSU) or acids; phosphoric and phosphorous acid; hazardous waste

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List of waste codes – contaminated packaging.

150110: WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Container disposal:**

Handle contaminated packages in the same way as the substance itself.

### Section 14: Transport Information

**ADR/RID**

UN Number: UN1805

UN Proper shipping name: PHOSPHORIC ACID, SOLUTION

Transport hazard class(es): 8

Packaging group: III

Hazard label: 8



Classification code: C1

Limited quantity: 5L

Excepted quantity: E1

Transport category: 3

Hazard no: 80

Tunnel restriction code: E

**IMDG**

UN Number: UN1805

UN Proper shipping name: PHOSPHORIC ACID, SOLUTION

Transport hazard class(es): 8

Packaging group: III

Hazard label: 8



Marine pollutant: NO

Special provisions: 223

Limited quantity: 5l

Excepted quantity: E1

EmS: F-A, S-B

**ICAO-TI/IATA-DGR**

UN Number: UN1805

UN Proper shipping name: PHOSPHORIC ACID, SOLUTION

Transport hazard class(es): 8

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Packaging group: III  
Hazard label: 8



Special provisions: A3 A803  
Limited quantity Passenger: 1L  
Passenger LQ: Y841  
Excepted quantity: E1  
IATA-packaging instructions - Passenger: 852  
IATA-max quantity – Passenger: 5L  
IATA-packaging instructions – Cargo: 856  
IATA-max quantity – Cargo: 60 L

Environmental Hazards: No

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

### Section 15: Regulatory Information

EU regulatory information:

Restrictions on use (REACH, annex XVII):

Entry 3: phosphoric acid; orthophosphoric acid...%

2010/75/EU (VOC): No information available

2004/42/EC (VOC): No information available

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Safety data sheet according to Regulation (EC) No 1907/2006 (amended by Regulation (EU) No 2019/957) The mixture is classified as hazardous according to regulation (EC) No 1272/2008 (CLP). REACH 1907/2006 Appendix XVII, No (mixture): 3

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1-slightly hazardous to water.