Chemifloc Ltd.

SAFETY DATA SHEET
Phosphoric Acid 75%

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

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

Identification of the substance or mixture

Product Name:	**Phosphoric acid 75%**
Chemical Name:	Phosphoric acid
Registration Number:	01-2119485924-24-xxxx
Synonyms:	
Date of first issue:	17 January 2011
Version number	04
Revision date:	24-03-2016
Supersedes date:	04-03-2016

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

Identified uses	Use in the treatment of raw water in the supply of either potable water or industrial process water Use in wastewater treatment
Uses advised against	None

Details of the supplier of the safety data sheet

Supplier:	Chemifloc Ltd Smithstown, Shannon, Co. Clare, Rep. of Ireland. Tel: 00353 61 708699 Fax: 00353 61 708698 e-mail: info@chemifloc.ie

Emergency Telephone Number: National Poison Information Centre, 00353 1 8379964

Section 2: Hazards Identification

Classification of the substance

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classificatory applies.

Classification according to Regulation (EC) no 1272/2008 as amended

Health hazards

Skin corrosion/irritation Category 1B H314 ï Causes severe skin burns and eye damage.

Hazard summary

Physical hazards	See section 9 for physicochemical information. No further information available.
Human Health	See section 11 for toxicological information. No further information available.
Environmental hazards	Not classified for hazards to the environment.

Label elements
Label according to Regulation (EC) No. 1272/2008 as amended
Contains: Phosphoric Acid

Signal word Danger
Hazard statements H314 - Causes severe skin burns and eye damage.

Precautionary statements
Prevention P260 - Do not breathe mist or vapour.
P280 ï Wear eye/face protection
Response P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 ï 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 or doctor/physician.
Supplemental label information. Not applicable
Other hazards Not assigned.

Section 3: Composition/Information on Ingredients

Substance
General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Phosphoric acid	75	7664-38-2 231-633-2	Not available	-	#
Water	25	7732-18-5			

Classification: **CLP:** Skin Corr. 1b;H314
#: This substance has workplace exposure limit(s).
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
Composition comments The full text for all H-phrases is displayed in section 16.

Section 4: First Aid Measures

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). In case of shortness of breath, give oxygen. Keep victim warm. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Description of first aid measures
Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.
Skin contact Get medical attention immediately. Wash clothing separately before reuse.

Eye contact Important! Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If possible use lukewarm water. Consult a physician. Continue rinsing eyes during transport to hospital.
Ingestion If material is ingested, immediately contact a physician or poison control centre. Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms and effects, both acute and delayed	Corrosive effects. May cause irreversible eye damage.
Indication of any immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm.

Section 5: Firefighting measures

General fire hazards	Non-combustible, substance itself does not burn. Do not inhale combustion gases. Fire may result in decomposition and release of harmful vapours including sulphur oxides.
Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing Media	None known.
Special hazards arising from the substance or mixture	The product itself does not burn. Reacts with many metals to produce flammable and explosive hydrogen gas. Do not inhale combustion gases. Fire may result in decomposition and release of harmful vapours including oxides of phosphorus.
Advice for firefighters	
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective clothing.
Special firefighting procedures	No unusual fire or explosion hazards noted.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Stay upwind.
For emergency responders	Not available.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.
Methods and material for containment and cleaning up	Should not be released into the environment. Prevent entry into waterways, sewers, basements or confined areas. Large Spills: Dike the spilled material, where this is possible. Soak up with inert absorbent material. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Sweep up or gather material and place in appropriate container for disposal. Following product recovery, flush area with water. After removal flush contaminated area thoroughly with water. Clean up in accordance with all applicable regulations. Small Spills: Neutralize with chalk, alkali solution or ammonia. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste. After removal flush contaminated area thoroughly with water. This material and its container must be disposed of as hazardous waste. For waste disposal, see Section 13.
Reference to other sections	Not available.

Section 7: Handling and storage

Precautions for safe handling	Avoid contact with eyes. Avoid prolonged exposure. Wash hands thoroughly after handling**.** Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Keep only in the original container. Store in corrosive resistant/container with a resistant inner liner. Keep out of the reach of children.

Tanks should be vented and fitted with an overflow pipe. Tanks should be bunded to contain spillage. Avoid freezing.

Keep away from incompatible materials. Store in a cool, dry, well-ventilated area away from sources of ignition.

Materials for packaging: Suitable material: plastic (PE, PP, PVC), fiberglass-reinforced polyester, acid proof or rubber-coated steel.

Materials to avoid: Bases, non-acid proof metals (for example aluminium, copper and iron), Avoid contact with unalloyed steel or galvanized surfaces.

Other data: Stable under recommended storage conditions.

Specific end use(s) The specified uses for this material are shown in section 1 of this document.

Section 8: Exposure controls / personal protection

Control parameters

Occupational exposure limits

Regulatory Basis : EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.
Regulatory List : EU ELV
Value type : Short Term Exposure Limit (STEL):
Value : 2 mg/m^3
Remarks : Indicative
Regulatory Basis : EU. Indicative Exposure and Directives relating to the protection of risks related to work exposure to chemical, physical, and biological agents.
Regulatory List : EU ELV
Value type : Time Weighted Average(TWA):
Value : 1 mg/m^3
Remarks : Indicative
Regulatory Basis : UK. EH40 Workplace Exposure Limits (WELs)
Regulatory List : EH40 WEL
Value type : Time Weighted Average (TWA):
Value : 1 mg/m^3
Regulatory Basis : UK. EH40 Workplace Exposure Limits (WELs)
Regulatory List : EH40 WEL
Value type : Short Term Exposure Limit (STEL):
Value : 2 mg/m^3

Exposure Controls
Engineering measures
Refer to protective measures listed in sections 7 and 8.
Personal protective equipment
Respiratory protection
Advice : Required, if exposure limit is exceeded (e.g. OEL).
Required if vapours or aerosol are released. In case of brief exposure or low pollution use breathing filter apparatus.
Combination filter:B-P2

Hand protection
Advice : The glove material has to be impermeable and resistant to the product / the substance / the preparation. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear. The following materials are suitable:
Material : butyl-rubber Gloves : >= 8 h Glove thickness : 0.5 mm (EN374)
Material : polychloroprene Gloves : >= 8 h Glove thickness : 0.5 mm
Material : Polyvinylchloride Gloves : >= 8 h Glove thickness : 0.5 mm
Material : Nitrile rubber Gloves : >= 8 h Glove thickness : 0.35 mm
Material : Fluorinated rubber Gloves : >= 8 h Glove thickness : 0.4 mm

Eye protection

Advice : Tightly fitting safety goggles (EN166)
Skin and body protection
Advice : Acid resistant protective clothing. (EN13034)

Environmental exposure controls
General advice : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Avoid subsoil penetration. If material reaches soil inform authorities responsible for such

Section 9: Physical and chemical properties

Information on basic physical and chemical properties
General information (Appearance, odour)

Physical State	Aquous solution
Colour	Clear
Odour	Not significant

Important health safety and environmental information

pH	<1.0
Melting point/range	Currently we do not have any Information from our supplier about this.
Boiling point / range	Currently we do not have any Information from our supplier about this.
Flash point	Currently we do not have any Information from our supplier about this.
Flammibility (solid, gas)	Currently we do not have any Information from our supplier about this.
Explosive properties	
- **Lower explosive limit**	Currently we do not have any Information from our supplier about this.
- **Upper explosive limit**	Currently we do not have any Information from our supplier about this.
Vapour Pressure	Currently we do not have any Information from our supplier about this.
Density	1.568 ï 1.580 @ 20°C.
Viscosity	Currently we do not have any Information from our supplier about this.
Solubility(ies)	
- **Water solubility**	miscible
Partition coefficient (n-octanol/water)	not applicable, inorganic compound.
Thermal Decomposition	Not available

Other information

Section 10: Stability and reactivity

Reactivity	No decomposition if stored and applied as directed**.**
Chemical stability	The product is chemically stable.
Possibility of hazardous reactions	Exothermic reaction with :Alkali metals
Conditions to avoid	No information available.
Incompatible materials	No information available.
Hazardous decomposition	Gives off hydrogen by reaction with metals.
Products	In case of fire hazardous decomposition products may be produced such as: oxides of phosphorus, phosphine.
Thermal decomposition	Not available

Section 11: Toxicological information

Information on toxicological effects
Product: phosphoric acid...%, orthophosphoric acid...% CAS No. 7664-38-2

Acute Toxicity

Oral	Cause serious burns with severe pains, vomiting, pains in the stomach, possibly chock and damaged kidneys. The burn may occur even if only small amounts have been swallowed.

Inhalation.	Inhalation may cause pain in respiratory system, sneezing, coughing and difficulty in breathing. Risk for pulmonary edema by high concentration.
Irritation:	
Skin	Species : rabbit Result : corrosive effects Method : OECD Test Guideline 404
Eyes	Species : rabbit Result : corrosive effects
Sensitisation:	Human experience not sensitizing
Further information:	
Other relevant toxicity information :	All numerical values for acute toxicity are calculated on the pure substances. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

Section 12: Ecological information

Product: phosphoric acid...%, orthophosphoric acid...% CAS No. 7664-38-2

Acute toxicity

Fish	Species: Gambusia affinis Exposure time: 96 hours Value type: LC50 Value: 138mg/l
Bacteria	Species: Activated sludge Value type: EC50 Value: 270mg/l

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

All numerical values for ecotoxicity effects are calculated on the pure substances. Harmful effects to aquatic organisms due to pH-shift. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Section 13: Disposal considerations

Waste treatment methods

Product	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.
Contaminated packaging	Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
European Waste Catalogue Number	No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Section 14: Transport information

ADR/RID:

UN Number:	1805
Proper Shipping Name:	PHOSPHORIC ACID, SOLUTION
Transport hazard class(es)	8
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Labels required	8
Special precautions for user	Not available.

IATA

UN Number:	1805
UN Proper Shipping Name:	PHOSPHORIC ACID, SOLUTION
Transport hazard class(es)	8
Subsidiary class(es)	-
Packing group	III
Environmental hazards	No
Special precautions for user	Not available.

IMDG

UN number	1805
UN proper shipping name	PHOSPHORIC ACID, SOLUTION
Transport hazard class(es)	8
Subsidiary class(es)	-
Packing group	III
Marine pollutant	No
EmS No.	F-A, S-B
Special precautions for user	Not available.

ADR

IATA

IMDG

Section 15: Regulatory information

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

EU Regulations

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registery (EPER)

Not listed

Regulation (EC) No. 1907/2006, Article 59(1). Candidate List

Not listed.

National regulations Not available.

Other regulations This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. No restrictions identified other than those already covered in regulations.

Chemical Safety Assessment

Currently we do not have any Information from our supplier about this.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances(PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Section 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H314 Causes severe skin burns and eye damage.

Training advice Not available

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date: **24-03-2016**
Revision date: **24-03-2016**
Print date: **24-03-2016**