Revision Number: 02 Date: 22.03.2018



1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: GO-pH Product code: GO-01

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

Fertiliser

1.3. Details of the supplier of the safety data sheet

Global Adjuvants Company Ltd 20-22 Wenlock Road, London, N1 7GU, UK Tel: +44 (0) 1480 810137

Email: office@global-adjuvants.com

1.4. Emergency telephone number

For advice on medical emergencies, fires, spillages or chemical hazards ONLY: +44 (0) 1480 810137

2. HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

According to the Regulation CE 1272/2008 (CLP)

Skin Corr. 1B; H314 Eye Dam. 1, H318

2.2. Label elements



Signal word: Danger

Hazard statements

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

Precautionary statements

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

P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353+P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.

P501: Dispose of contents/container in accordance to local/national/international regulations.

2.3. Other hazards

In accordance with that established in Appendix XII of EU Regulation No 1907/2006, the substance does not comply with the identification criteria PBT or vPvB.

Revision Number : 02 Date : 22.03.2018



3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Name	% p/p	CAS	IUPAC	Index no.	REACh reg. no.	Regulation classification 1272/2008
Phosophoric Acid	33.00	7665-38-2	Phosphoric acid	015-011- 00-6	01-2119485924-24- xxxx	Skin Corr. 1B; H314

See section 16 for full text of H phrases.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Ingestion

Rinse out the mouth and, if the person is conscious, give them plenty of water. Seek medical attention.

Inhalation

Breathe fresh air. In case of discomfort, seek medical attention.

Skin contact

Rinse well with soap and water. Remove stained or spattered clothing. If irritation persists, seek medical attention.

Eye contact

Rinse with abundant water for at least 15 minutes. Hold the eyelids open and keep rinsing. Remove contact lenses, if worn. If irritation persists, seek medical attention.

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

Acute - Irritation of the skin and eyes.

Delayed - Respiratory irritation. Unconsciousness.

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

In the event of ingestion, consider the possibility of an endoscope and stomach pump. The inhalation of gases from a fire may produce methaemoglobin.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable

Water

<u>Unsuitable</u>

Do not suffocate the fire with sand, vapour or foam extinguishers.

5.2. Special hazards arising from the mixture

May exacerbate fire. May maintain fire even in the absence of oxygen. May decompose during fire generating toxic gases such as nitrogen oxide.

5.3. Advice for firefighters

Refrigerate containers exposed to fire. Use autonomous breathing apparatus and suitable, fire protection equipment. Prevent the water used during extinction from reaching the sewage network.

Revision Number : 02 Date : 22.03.2018



6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use safety glasses, chemical agent-resistant gloves (PVC) and rubber boots. Follow OSHA standards regarding respirators described in 29 CFR 1910.134 or European standards EN 149.

6.2. Environmental precautions

Prevent the product from reaching public sewage networks or water supplies. Notify the competent authorities in the event of water supply contamination.

6.3. Methods and material for containment and cleaning up

Contain and/or clean up the spill with suitable material non-combustible (sand, chalk, dolomite, plaster) or dilute with plenty of water. Gather the spill in labelled containers.

6.4. Reference to other sections

See sections 8 and 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Technical measures / Preventive measures

Avoid mixing with combustible materials. Use the recommended personal safety equipment.

General measures

Avoid contact with skin and eyes. Keep away from foodstuffs and drinks.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and ignition sources and combustible substances. Do not store in direct sunlight. Store in plastic or stainless-steel containers.

7.3. Specific end use(s)

See exposure scenarios.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Limit exposure values	Component	CAS	Limit exposure value
	Phosphoric Acid	7665-38-2	VLAED: 1 mg/m ³
	•		VLAEC: 2 mg/m ³

		Indu	ıstrial			Consumer		
Derivative ISQ – DNEL – Oral			Unavailable			Unavailable		
Derivative ISQ – DNEL – Inhalation			2.92 mg/m ³			0.73 mg/kg pc/day		
Derivative ISQ – DNEL – Dermal			Corrosive			Corrosive		
Derivative ISQ – PNEC	Water		Air	Soil	М	icrobiology	Sediment	Oral
	Unavaila	ble	Unavailable	Unavailable	Uı	navailable	Unavailable	Unavailable

8.2. Exposure controls

Technical controls

Emergency eyewash and showers should be available: Work should be carried out with sufficient ventilation.

SAFETY DATA SHEET

According to Commission Regulation (EU) No 453/2010

Revision Number : 02 Date : 22.03.2018



Eye protection

Protective glasses against chemical products. Protection screens for the entire face.

Body and skin protection

Protective clothing. Rubber boots.

Respiratory protection

In the case of vapours use face masks with filters.

Hand protection

Gloves resistant to chemical agents.

Control of exposure to the environment

Prevent the product from reaching public sewage networks or water supplies. See section 6.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Clear liquid

Smell: Characteristic of fertilizers Odour threshold: Unknown

pH: < 2

Melting point/freezing point: It depends on the mixture. See the crystallization temperature in the specification data sheet of the

product.

Boiling point/range: Unknown Flash point: Non-flammable Evaporation rate: Unknown Flammability: Non-flammable

Upper/lower flammability or explosive limit: Non-flammable / Not explosive

Vapour pressure: Unknown Vapor density: Unknown

Relative density: 1.0 - 1.4 g/cc (20 °C)

Solubility: Water-soluble

noctanol/water partition coefficient: Unknown Autoignition temperature: Non-flammable Decomposition temperature: Unknown

Viscosity: Not available

Explosive properties: Not explosive Oxidising properties: Not oxidizing

10. STABILITY AND REACTIVITY

10.1. Reactivity

May react violently with strong bases.

10.2. Chemical stability

Product is stable under normal conditions of storage and use.

10.3. Possibility of hazardous reactions

May decompose during fire, generating toxic gases such as nitrogen oxides.

10.4. Conditions to avoid

High temperature.

10.5. Incompatible materials

SAFETY DATA SHEET

According to Commission Regulation (EU) No 453/2010

Revision Number: 02 Date: 22.03.2018



Alkali and metals

10.6. Hazardous decomposition products

Nitrogen oxides. In contact with metals may produce hydrogen.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicolog

Αсι		

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	-	Rat	Oral	LD50 = 2600 mg/kg (Phosphoric Acid 75%)

Corrosion/irritation

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	-	-	Cutaneous. Ocular.	Corrosive

Sensitization

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	-	-	-	Non-sensitizing

Toxicity through repeated doses

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	-	-	-	Not available. No data

Carcinogenic

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	Not applicable	-	-	Not available. No data

Mutagenicity

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	OECD 471, 473, 476	-	-	Not mutagenic

Reprotoxic

Component	CAS	Method	Species	Via	Result
Phosphoric Acid	7665-38-2	OECD 422	Rat	Oral	Not reprotoxic

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity

Component	CAS	Fishes	Crustaceans	Seaweeds
Phosphoric Acid	7665-38-2	Lethal pH = 3 - 3.25	LC50 (48h) > 100 mg/L	EC50 (72h) > 100 mg/L

Terrestrial toxicity

Component	CAS	Macroorganism	Microorganism	Other organisms
Phosphoric Acid	7665-38-2	Unavailable	Unavailable	Unavailable

Microbiological activity in residual water treatment plants

Component	CAS	Aquatic microorganism toxicity
Phosphoric Acid	7665-38-2	Unavailable

12.2. Persistence and degradability

Component	CAS	Period	Deterioration half-life	Deterioration period in waste water treatment plants
Phosphoric Acid	7665-38-2	Hydrolysis: Not applicable Photolysis: Not applicable Biodegradation: Not applicable	Not applicable	Not applicable

According to Commission Regulation (EU) No 453/2010

Revision Number : 02 Date : 22.03.2018



12.3. Bioaccumulation potential

Component	CAS	Octanol-water partition coefficient (Kow)	Bioconcentration factor (BCF)	Memo
Phosphoric Acid	7665-38-2	Not applicable	-	Does not bioaccumulate

12.4. Mobility in soil

	CAS	Component
osorbed by plants and used as a nutrient. They may also form		Phosphoric Acid
ounds are not soluble in water and form part of the soil or		
ounds are not soluble in water and form part of		

12.5. Evaluation results for inorganic substances

Being inorganic substances, evaluation criteria are not applied

12.6. Others adverse effects

Unavailable

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Residues

Neutralise the waste with sand, limestone, dolomite or plaster or dilute with abundant water.

Dispose of as field fertiliser or in an authorised waste treatment facility.

Packing Packing

Empty the containers completely and dispose of as non-hazardous material or material for recycling if local legislation so permits.

14. TRANSPORT INFORMATION

14.1. UN number: 1760

14.2. UN proper shipping name: Corrosive liquid N.O.S (containing phosphoric acid)

14.3. Transport hazard class(es): 8

14.4. Packing group: III

14.5. Environmental hazards: Not dangerous.

14.6. Special precautions for user: See section 7 and 8. Limited quantity 5L.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

15. REGULATORY INFORMATION

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

@TEC2364

@TEC2365

@TEC2366

15.2. Chemical safety assessment

Chemical Safety Evaluation carried out for the components of the mixture.

SAFETY DATA SHEET

According to Commission Regulation (EU) No 453/2010

Revision Number : 02 Date : 22.03.2018



16. OTHER INFORMATION

Hazard statements

H318: Causes serious eye damage.

H314: Causes severe skin burns and eye damage.

Precautionary statements

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

P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353+P310: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P363: Wash contaminated clothing before reuse.

P501: Dispose of contents/container in accordance to local/national/international regulations.

Bibliography and data sources

Safety Information Sheets of hazardous components.

Abbreviations and acronyms

NOAEL: No Observed Adverse Effects Level

LD50: Lethal dose 50%

LC50: Lethal concentration 50%

DNEL: Concentration without derived effect. PNEC: Predicted No-Effect Concentration

Suitable employee training

Obligatory training in occupational risk prevention.

Disclaimer: The information presented herein is based on available data from reliable sources. Our company makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for the determining suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.