

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 24.10.2023 Version: 1.0

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

1.1. Product identifier

Product form Product name Type of product Product group : Mixture

- : pH Down 30%
- : Water treatment chemicals
- : Trade product

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

1.2.1. Relevant identified uses

Intended for general public Main use category Use of the substance/mixture

: Consumer use

: pH-regulating agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Growth Technology Limited Great Western Way TA2 6BX Taunton – Somerset UK T +44 (0)1823 325291 info@growthtechnology.com - www.growthtechnology.com

1.4. Emergency telephone number

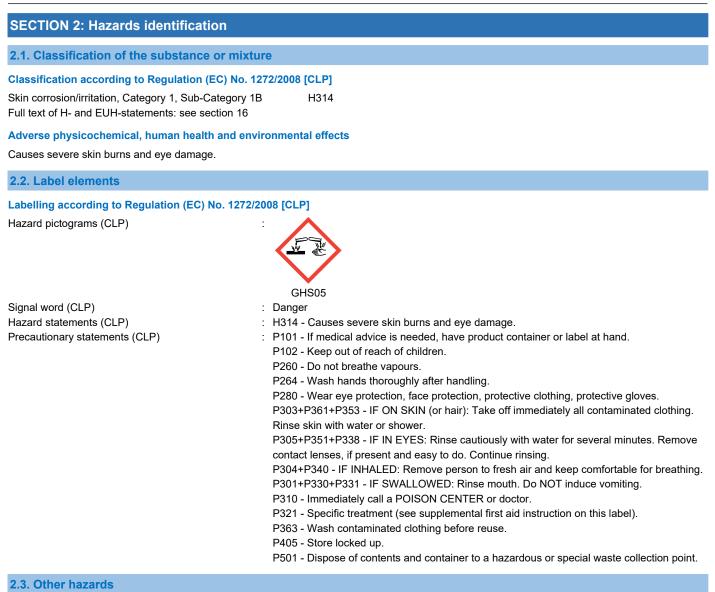
Emergency number

: +44 (0)1823 325291 office hours only: Monday - Friday 0800 - 1700 (GMT/UTC)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX Cardiff	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB Newcastle	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for healthcare professionals

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PBT: not relevant - no registration required

vPvB: not relevant - no registration required

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures			
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Phosphoric acid substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924- 24	30	Skin Corr. 1B, H314

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Phosphoric acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924- 24	(10 ≤ C < 25) Skin Irrit. 2, H315 (10 ≤ C < 25) Eye Irrit. 2, H319 (25 ≤ C ≤ 100) Skin Corr. 1B, H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	
First-aid measures general	: Immediately remove contaminated clothing or footwear.
First-aid measures after inhalation	 Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. Immediately call a POISON CENTER/doctor.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor.
First-aid measures after eye contact	 Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	: Do not induce vomiting. Rinse mouth out with water. Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms and eff	ects, both acute and delayed
Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.
Symptoms/effects after skin contact	: Highly corrosive to skin. Causes severe burns.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

Treat symptomatically. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Use extinguishing agent suitable for surrounding fire.			
5.2. Special hazards arising from the substance or mixture				
Explosion hazard Hazardous decomposition products in case of fire	Contact with metals could evolve flammable hydrogen gas.Phosphorus oxides.			

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 Do not allow run-off from fire-fighting to enter drains or water courses. Self-contained breathing apparatus. Complete protective clothing.
neasures
equipment and emergency procedures
: Stop leak if safe to do so. Do not handle until all safety precautions have been read and understood.
 Concerning personal protective equipment to use, see section 8. Do not get in eyes, on skin, or on clothing. Do not breathe mist, vapours. Only qualified personnel equipped with suitable protective equipment may intervene.
 Concerning personal protective equipment to use, see section 8. Do not get in eyes, on skin, or on clothing. Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not allow product to spread into the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up		
For containment Methods for cleaning up	 Stop leak without risks if possible. For a large spillage, contain the spillage by bunding. Only qualified personnel equipped with suitable protective equipment may intervene. Take up liquid spill into absorbent material. Shovel or sweep up and put in a closed container for disposal. Clean contaminated surfaces with an excess of water. Notify authorities if product enters sewers or public waters. Small spills: Neutralise with a carbonate solution and wash with plenty of water. 	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		

SECTION 8. SECTION 13.

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Additional hazards when processed Precautions for safe handling	 May be corrosive to metals. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe vapours, mist. Do not get in eyes, on skin, or on clothing. Keep only in original container. Handle and open container with care. 		
Hygiene measures 7.2. Conditions for safe storage, inclu	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.		
Technical measures Storage conditions	: Keep out of reach of children. : Keep only in original container. Keep cool.		
Incompatible products	: Strong bases. Oxidizing agent.		
Incompatible materials	: Metals.		
Special rules on packaging	: Keep only in original container.		
7.3. Specific end use(s)			

Water treatment chemicals.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Phosphoric acid (7664-38-2)		
United Kingdom - Occupational Exposure Limits		
Local name Orthophosphoric acid		
WEL TWA (OEL TWA) [1]	1 mg/m³	
WEL STEL (OEL STEL)	2 mg/m ³	
Regulatory reference EH40/2005 (Fourth edition, 2020). HSE		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Phosphoric acid (7664-38-2)		
DNEL/DMEL (Workers)		
Long-term - local effects, inhalation 2,92 mg/m ³		
DNEL/DMEL (General population)		
Long-term - local effects, inhalation 0,73 mg/m ³		

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Protective goggles or face shield. ISO 16321-1

8.2.2.2. Skin protection

Skin and body protection: acid-resistant protective clothing

Hand protection:

Chemical resistant gloves (according to European standard ISO 374-1 or equivalent). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Butyl rubber	6 (> 480 minutes)	0.5		
Reusable gloves	Polyvinylchloride (PVC)	6 (> 480 minutes)	0.5		
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35		

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Other skin protection

Materials for protective clothing:

acid-resistant protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Appearance	:	Clear to cloudy.
Odour	:	slight.
Odour threshold	:	Not applicable.
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable
Explosive properties	:	Not expected to be a fire/explosion hazard under normal conditions of use.
Oxidising properties	:	Does not meet the criteria for classification as oxidising.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not applicable (aqueous non combustible product)
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	< 2
pH solution	:	< 2
Viscosity, kinematic	:	Not available
Solubility	:	soluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not volatile
Vapour pressure at 50°C	:	Not available
Density	:	≈ 1,17 kg/l
Relative density	:	1,17
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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10.2. Chemical stability		

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidizing agent. Strong bases. Metals.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information			
11.1. Information on hazard classes as o	lefined in Regulation (EC) No 1272/2008		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified 		
Phosphoric acid (7664-38-2)			
LD50 oral rat	2600 mg/kg OECD 423		
LD50 dermal rabbit	2740 mg/kg		
Skin corrosion/irritation	: Causes severe skin burns. pH: < 2		
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: < 2		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
Phosphoric acid (7664-38-2)			
NOAEL (animal/male, F0/P)	≥ 500 mg/kg OECD 422		
STOT-single exposure	Not classified		
STOT-repeated exposure	: Not classified		
Phosphoric acid (7664-38-2)			
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)		
Aspiration hazard	: Not classified		
11.2. Information on other hazards			

No additional information available

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general Hazardous to the aquatic environment, short–term (acute)	 Before neutralisation, the product may represent a danger to aquatic organisms. Not classified

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Hazardous to the aquatic environment, long–term : Not classified (chronic)		
Phosphoric acid (7664-38-2)		
LC50 - Fish [1]	138 mg/l	
LC50 - Fish [2]	3 – 3,25 mg/l	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	
NOEC chronic algae	100 mg/l	
12.2. Persistence and degradability		
pH Down 30%		
Persistence and degradability	Not established.	
12.3. Bioaccumulative potential		
pH Down 30%		
Bioaccumulative potential	Not applicable.	
12.4. Mobility in soil		
pH Down 30%		
Ecology - soil	Expected to be highly mobile in soil.	
12.5. Results of PBT and vPvB assessment		
pH Down 30%		
PBT: not relevant – no registration required		
vPvB: not relevant – no registration required		
12.6. Endocrine disrupting properties		
No additional information available		
12.7. Other adverse effects		
No additional information available		

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods Product/Packaging disposal recommendations Dispose of contents/container in accordance with licensed collector's sorting instructions.
 a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID				
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID number				
UN 1805	UN 1805	UN 1805	UN 1805	UN 1805

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.2. UN proper shipping name				
PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID SOLUTION	Phosphoric acid, solution	PHOSPHORIC ACID, SOLUTION	PHOSPHORIC ACID, SOLUTION
Transport document descr	iption			
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
B	B	B	B	B
14.4. Packing group	1			
III	III	III	III	III
14.5. Environmental haz	zards			
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	on available			
14.6. Special precaution	s for user			
Overland transportClassification code (ADR):C1Limited quantities (ADR):51Excepted quantities (ADR):E1Packing instructions (ADR):P001, IBC03, LP01, R001Mixed packing provisions (ADR):MP19Portable tank and bulk container instructions (ADR):T4Portable tank and bulk container special provisions:TP1(ADR):L4BNTank code (ADR):IU42Vehicle for tank carriage:ATTransport category (ADR):3Special provisions for carriage - Packages (ADR):V12Hazard identification number (Kemler No.):80Orange plates:80Image: State St				
Tunnel restriction code (ADR EAC code) : E : 2R			
Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDC) EmS-No. (Fire)	DG) : IBC : T4	01, LP01 003 1		

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	, , ,
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Segregation (IMDG)	: SG36, SG49
Properties and observations (IMDG)	: Miscible in water. Mildly corrosive to most metals.
Air transport	
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, A803
ERG code (IATA)	: 8L
Inland waterway transport	
Classification code (ADN)	: C1
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Rail transport	
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
Special provisions for RID tanks (RID)	: TU42
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

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Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

United Kingdom

British National Regulations

: Contains a regulated Explosive Precursor according to The Control of Poisons and Explosives Precursors Regulations 2023 (UK).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acr	onyms:		
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		
BLV	Biological limit value		
CAS-No.	Chemical Abstract Service number		
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC50	Median effective concentration		
EC-No.	European Community number		
EN	European Standard		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OEL	Occupational Exposure Limit		
РВТ	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
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		

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Abbreviations and acronyms:		
vPvB Very Persistent and Very Bioaccumulative		
WGK Water Hazard Class		
Full text of H- and EUH-statements:		

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H314	auses severe skin burns and eye damage.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Corr. 1B	H314	Expert judgment

Safety Data Sheet (SDS), EU

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.