

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name: Oxygen Tablets
Contains: Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Potassium hydrogensulphate
Dipotassium peroxodisulphate
Datasheet Number: SDS 026
UFI: R720-10KU-Y009-M6VG

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

Use of the substance/mixture: Pool / spa treatment; Biocide
Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Plastica Ltd
Address of Supplier: Perimeter House
Napier Road
St Leonards-on-Sea
East Sussex
United Kingdom
TN38 9NY
Telephone: +44 (0) 1424 857857
Email: info@plasticapools.net

1.4 Emergency telephone number

Emergency Telephone: 0800 043 0891 (technical)
0800 043 0892 (emergency)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; Resp Sens. 1, H334; Aquatic Chronic 3, H412

Additional information: For full text of Hazard and EU Hazard statements: see section 16

2.2 Label elements



Signal Word: Danger

A tactile warning of danger (TWD, raised triangle) is required for this product

Containers must be fitted with child-resistant fastenings

Hazard statements

- H302 - Harmful if swallowed.
- H314 - Causes severe skin burns and eye damage.
- H317 - May cause an allergic skin reaction.
- H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H412 - Harmful to aquatic life with long lasting effects.

SECTION 2: Hazards identification (....)

Precautionary statements

P102 - Keep out of reach of children.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

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

P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

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.

P501 - Dispose of contents/container to an authorised waste collection point

Supplemental Hazard information (EU)

None

2.3 Other hazards

Not a PBT according to REACH Annex XIII

Not a vPvB according to REACH Annex XIII

Does not contain any substances with endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Contains the following hazardous ingredients or ingredients with a workplace exposure limit:

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	25 -100%	70693-62-8	274-778-7	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	-	01-2119485567 -22-XXXX	No
Adipic acid	1 - 10%	124-04-9	204-673-3	Eye Irrit. 2, H319	-	01-2119457561 -38-XXXX	No
Potassium hydrogensulphate	2 - 5%	7646-93-7	231-594-1	Skin Corr. 1B, H314 STOT SE 3, H335	-	-	No
Dipotassium peroxodisulphate; potassium persulphate	1 - 4 %	7727-21-1	231-781-8	Ox. Sol. 3, H272 Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Resp Sens. 1, H334 STOT SE 3, H335	-	01-2119495676 -19-XXXX	No
Boric acid	< 0.3%	10043-35-3	233-139-2	Repr. 1B, H360FD	-	01-2119486683 -25-XXXX SVHC	No

SECTION 4: First aid measures

4.1 Description of first aid measures

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

Rescuers should take suitable precautions to avoid becoming casualties themselves

Contact with eyes

SECTION 4: First aid measures (....)

If substance has got into eyes, immediately wash out with plenty of water for several minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
Get immediate medical advice/attention.

Contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water
Contaminated clothing should be laundered before reuse
Get immediate medical advice/attention.

Ingestion

Rinse mouth with water (do not swallow)
Give plenty of water to drink
Do NOT induce vomiting.
If vomiting occurs turn patient on side
Get immediate medical advice/attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing.
Keep warm and at rest, in a half upright position. Loosen clothing
If breathing is difficult, oxygen should be given by a trained person
Apply artificial respiration only if patient is not breathing
Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed**Contact with eyes**

May cause severe damage with formation of corneal ulcers and permanent impairment of vision.

Contact with skin

May cause severe burns with permanent skin damage which are slow to heal.
May cause an allergic skin reaction.

Ingestion

Can cause soreness and redness of the mouth and throat.
May cause burns to mouth and throat
May cause stomach pain
Harmful if swallowed.

Inhalation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Prolonged exposure due to inhalation may cause anaesthetic effects

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures (....)

Gives off irritating or toxic fumes (or gases) in a fire.

Decomposition products may include carbon oxides, sulphur oxides and corrosive vapours

5.3 Advice for firefighters

Evacuate the area and keep personnel upwind

Keep container(s) exposed to fire cool, by spraying with water

Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains.

Prevent fire extinguishing water from contaminating surface or ground water.

Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Rescuers should take suitable precautions to avoid becoming casualties themselves

Only trained and authorised personnel should carry out emergency response

Personal precautions for non-emergency personnel: Ensure adequate ventilation; Do not breathe dust; Avoid contact with skin and eyes; Wash thoroughly after handling.

Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; In case of insufficient ventilation, wear suitable respiratory equipment; Wear protective clothing as per section 8; Wash thoroughly after dealing with spillage

6.2 Environmental precautions

Do not allow to penetrate the ground/soil.

Do not allow to enter public sewers and watercourses

If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

Stop leak if safe to do so.

Avoid formation of dust

Absorb spillage in inert material and shovel up

Place in appropriate container

Seal containers and label them

Remove contaminated material to safe location for subsequent disposal

Ventilate the area and wash spill site after material pick-up is complete

Seek expert advice for removal and disposal of all contaminated materials and wastes

6.4 Reference to other sections

See section(s): 7, 8 & 13

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Ensure adequate ventilation

SECTION 7: Handling and storage (....)

Avoid formation of dust

Do not breathe dust

Do not mix with other chemicals

Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

Do not get in eyes, on skin, or on clothing.

Wear goggles giving complete eye protection

Wear protective clothing as per section 8

Contaminated clothing should be laundered before reuse

Use good personal hygiene practices

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Ensure eyewash stations and safety showers are nearby

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry well-ventilated place. Keep container tightly closed.

Opened containers should be carefully resealed and stored in an upright position

Keep only in the original container

Keep in an area equipped with impermeable flooring.

Store at 5 - 25 °C

Keep away from heat and sources of ignition

Keep away from direct sunlight

Keep away from food, drink and animal feedingstuffs

Protect from moisture

Keep away from combustible material

Incompatible with strong acids, strong bases, oxidising agents, halogenated compounds, cyanides, heavy metal salts

7.3 Specific end use(s)

Pool / spa treatment

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents).

Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

SECTION 8: Exposure controls/personal protection (....)**Pentapotassium bis(peroxymonosulphate) bis(sulphate)**

DNEL (inhalational) 112 µg/m³ Industry, Long Term, Local Effects
DNEL (dermal) 4 mg/kg bw/day Industry, Long Term, Systemic Effects
DNEL (inhalational) 56 µg/m³ Consumer, Long Term, Local Effects
DNEL (dermal) 2 mg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 1 mg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 3 mg/kg bw/day Consumer, Acute/Short Term, Systemic Effects
PNEC aqua (freshwater) 22.2 µg/L
PNEC aqua (intermittent releases, freshwater) 10 µg/L
PNEC aqua (marine water) 2.22 µg/L
PNEC aqua (intermittent releases, marine water) 5.56 µg/L
PNEC (STP) 1 mg/L
PNEC sediment (freshwater) 79.92 µg/kg
PNEC sediment (marine water) 7.992 µg/kg
PNEC terrestrial (soil) 2.996 µg/kg

Adipic acid

DNEL (inhalational) 74.1 mg/m³ Industry, Long Term, Systemic Effects
DNEL (dermal) 21 mg/kg bw/day Industry, Long Term, Systemic Effects
DNEL (inhalational) 13 mg/m³ Consumer, Long Term, Systemic Effects
DNEL (dermal) 7.5 mg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 7.5 mg/kg bw/day Consumer, Long Term, Systemic Effects
PNEC aqua (freshwater) 126 µg/L
PNEC aqua (intermittent releases, freshwater) 460 µg/L
PNEC aqua (marine water) 12.6 µg/L
PNEC sediment (freshwater) 474 µg/kg
PNEC sediment (marine water) 47.4 µg/kg
PNEC terrestrial (soil) 20.8 µg/kg

Potassium hydrogensulphate

No exposure limits have been set for this substance

Dipotassium peroxodisulphate

DNEL (inhalational) 824 µg/m³ Industry, Long Term, Local Effects
DNEL (dermal) 12.7 mg/kg bw/day Industry, Long Term, Systemic Effects
DNEL (inhalational) 421 µg/m³ Consumer, Long Term, Local Effects
DNEL (dermal) 4.6 mg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 460 µg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 1.37 mg/kg bw/day Consumer, Acute/Short Term, Systemic Effects
PNEC aqua (freshwater) 518 µg/L
PNEC aqua (intermittent releases, freshwater) 763 µg/L
PNEC aqua (marine water) 51.8 µg/L
PNEC (STP) 3.6 mg/L
PNEC sediment (freshwater) 2.03 mg/kg
PNEC sediment (marine water) 203 µg/kg
PNEC terrestrial (soil) 100 µg/kg

Boric acid

DNEL (inhalational) 8.3 mg/m³ Industry, Long Term, Systemic Effects
DNEL (dermal) 392 mg/kg bw/day Industry, Long Term, Systemic Effects
DNEL (inhalational) 4.15 mg/m³ Consumer, Long Term, Systemic Effects
DNEL (dermal) 196 mg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 980 µg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 980 µg/kg bw/day Consumer, Acute/Short Term, Systemic Effects
PNEC aqua (freshwater) 2.9 mg/L
PNEC aqua (intermittent releases, freshwater) 13.7 mg/L
PNEC aqua (marine water) 2.9 mg/L
PNEC (STP) 10 mg/L
PNEC terrestrial (soil) 5.7 mg/kg

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection (....)

Selection and use of personal protective equipment should be based on a risk assessment of exposure potential

Engineering controls

Ensure adequate ventilation

Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment

Wear suitable filtering half mask respirator approved to standard EN 149

Particle filter P2

Eye/face protection

Wear goggles giving complete eye protection approved to standard EN 166.

If risk of splashing, wear face-shield approved to standard EN 166 1B39N

Skin protection

Wear chemical resistant clothing approved to standard EN 13034 or BS EN 14605

Wear chemical resistant boots

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

The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.

PVC or rubber gloves are recommended

Glove material: PVC

Thickness: 0.35 mm

Breakthrough time: > 480 min

Reference: Manufacturer

Thermal hazards

Not applicable

Hygiene measures

Do not eat, drink or smoke when using this product.

Use good personal hygiene practices

Wash thoroughly after handling.

Contaminated clothing should be laundered before reuse

Contaminated work clothing should not be allowed out of the workplace.

Ensure eyewash stations and safety showers are nearby

Environmental exposure controls

Do not empty into drains

Do not allow to penetrate the ground/soil.



SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Physical state:	Solid
Colour:	White
Odour:	Odourless

SECTION 9: Physical and chemical properties (....)

Melting point/freezing point: No data available
Boiling point or initial boiling point and boiling range: No data available
Flammability: Not flammable
Lower and upper explosion limit: Not applicable
Flash point: 288 °C
Auto-ignition temperature: No data available
Decomposition temperature: No data available
pH: 2 - 3 (1% solution)
Kinematic viscosity: No data available
Solubility: Not determined
Partition coefficient n-octanol/water (log value): Not determined
Vapour pressure: No data available
Density and/or relative density: 1.122
Relative vapour density: No data available
Particle characteristics: No data available

9.2 Other information

None

SECTION 10: Stability and reactivity**10.1 Reactivity**

No hazardous reactions known if used for its intended purpose

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

Reacts with alkalis (strong bases)

10.4 Conditions to avoid

Keep away from heat and sources of ignition

10.5 Incompatible materials

Incompatible with strong acids, strong bases, oxidising agents, halogenated compounds, cyanides, heavy metal salts

10.6 Hazardous decomposition products

Decomposition products may include carbon oxides, sulphur oxides and corrosive vapours

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute Toxicity**

Harmful if swallowed

Classification based on calculation and concentration thresholds

SECTION 11: Toxicological information (....)

Substances

Chemical Name	LD ₅₀ (oral, rat)	LC ₅₀ (inhalation, rat)	LD ₅₀ (dermal, rabbit)
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	500 mg/kg	(4 h) 1.85 - 5 mg/L	2 000 mg/kg (rat)
Adipic acid	5 560 mg/kg	LC0 (4 h) 7.7 mg/L	LD0 7 940 mL/kg
Potassium hydrogensulphate	2 000 - 2 140 mg/kg	No data available	No data available
Dipotassium peroxodisulphate	920 - 1 200 mg/kg	(4 h) 2.95 mg/L	2 000 mg/kg (rat)
Boric acid	2 600 - 4 080 mg/kg	(4 h) 2.12 mg/L	2 000 mg/kg

Skin corrosion/irritation

Causes severe skin burns

Classification based on calculation and concentration thresholds

Substances

Chemical Name	Irritation/corrosion
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Adverse effect observed (corrosive)
Adipic acid	No adverse effect observed (not irritating)
Potassium hydrogensulphate	Adverse effect observed (corrosive)
Dipotassium peroxodisulphate	Adverse effect observed (irritating)
Boric acid	No adverse effect observed (not irritating)

Serious eye damage/irritation

Causes serious eye damage

Classification based on calculation and concentration thresholds

Substances

Chemical Name	Irritation/corrosion
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Adverse effect observed (irreversible damage)
Adipic acid	Adverse effect observed (irritating)
Potassium hydrogensulphate	No data available
Dipotassium peroxodisulphate	Adverse effect observed (irritating)
Boric acid	No adverse effect observed (not irritating)

Respiratory or skin sensitisation

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Classification based on calculation and concentration thresholds

Substances

Chemical Name	Skin sensitisation	Respiratory sensitisation
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	No adverse effect observed (not sensitising)	No adverse effect observed (not sensitising)
Adipic acid	No adverse effect observed (not sensitising)	No study available
Potassium hydrogensulphate	No adverse effect observed (not sensitising)	No data available
Dipotassium peroxodisulphate	Adverse effect observed (sensitising)	Adverse effect observed (sensitising)
Boric acid	No adverse effect observed (not sensitising)	No study available

SECTION 11: Toxicological information (....)**Germ cell mutagenicity**

Based on available data, the classification criteria are not met

Substances

Chemical Name	Toxicity - In Vitro	Toxicity - In Vivo
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	No adverse effect observed (negative)	No adverse effect observed (negative)
Adipic acid	No adverse effect observed (negative)	No adverse effect observed (negative)
Potassium hydrogensulphate	No data available	No data available
Dipotassium peroxodisulphate	No adverse effect observed (negative)	No adverse effect observed (negative)
Boric acid	No adverse effect observed (negative)	No adverse effect observed (negative)

Carcinogenicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	No data available	No data available	No data available
Adipic acid	No data available	No data available	No data available
Potassium hydrogensulphate	No data available	No data available	No data available
Dipotassium peroxodisulphate	No data available	No data available	No data available
Boric acid	1 150 mg/kg bw/day	No data available	No data available

Reproductive toxicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	No data available	No data available	No data available
Adipic acid	750 mg/kg bw/day (Effect on fertility)	No data available	No data available
Potassium hydrogensulphate	No data available	No data available	No data available
Dipotassium peroxodisulphate	50 mg/kg bw/day (Effect on fertility) 30 mg/kg bw/day (Effect on developmental toxicity)	No data available	No data available
Boric acid	No data available	No data available	No data available

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met

Substances

Chemical Name	Route	Remarks
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Respiratory	No study available
Adipic acid	Respiratory	No data available

SECTION 11: Toxicological information (....)

Potassium hydrogensulphate	Respiratory	No data available
Dipotassium peroxodisulphate	Respiratory	Adverse effect observed (irritating)
Boric acid	Respiratory	No adverse effect observed (not irritating)

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	200 mg/kg bw/day	1.4 mg/m ³	No data available
Adipic acid	750 mg/kg bw/day	No data available	No data available
Potassium hydrogensulphate	No data available	No data available	No data available
Dipotassium peroxodisulphate	91 mg/kg bw/day	10.3 mg/m ³	No data available
Boric acid	100 mg/kg bw/day	57 - 470 mg/m ³	No data available

Aspiration hazard

Based on available data, the classification criteria are not met

Contact with eyes

May cause severe damage with formation of corneal ulcers and permanent impairment of vision.

Contact with skin

May cause severe burns with permanent skin damage which are slow to heal.

May cause an allergic skin reaction.

Ingestion

Can cause soreness and redness of the mouth and throat.

May cause burns to mouth and throat

May cause stomach pain

Harmful if swallowed

Inhalation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Prolonged exposure due to inhalation may cause anaesthetic effects

11.2 Information on other hazards

Does not contain any substances with endocrine disrupting properties

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects Classification

based on calculation and concentration thresholds

SECTION 12: Ecological information (....)

Substances

Chemical Name	LC ₅₀ (fish)	EC ₅₀ (aquatic invertebrates)	EC ₅₀ (aquatic algae)
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	(4 days) 1.09 - 53 mg/L	(48 h) 3.5 mg/L	556 µg/L - 1 mg/L
Adipic acid	LC ₀ (4 days) 1 g/L	LC ₅₀ (48 h) 46 mg/L	(72 h) 64.5 mg/L
Potassium hydrogensulphate	No data available	LC ₅₀ (48 h) 1.766 - 6.499 g/L	No data available
Dipotassium peroxodisulphate	(4 days) 76.3 - 107.6 mg/L	(48 h) 120 mg/L	(72 h) 136 - 320 mg/L
Boric acid	(4 days) 74 - 79.7 mg/L	LC ₅₀ (48 h) 91 - 165 mg/L	(72 h) 40.2 - 66 mg/L

12.2 Persistence and degradability

Some ingredients are biodegradable

Substances

Chemical Name	Biodegradation
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Not applicable, inorganic
Adipic acid	Readily biodegradable in water (100%)
Potassium hydrogensulphate	Not applicable, inorganic
Dipotassium peroxodisulphate	Not applicable, inorganic
Boric acid	Not applicable, inorganic

12.3 Bioaccumulative potential

Substances

Chemical Name	Bioconcentration Factor (BCF)	Log K _{ow}
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Low potential for bioaccumulation (Log K _{ow} ≤ 3)	(Log Pow) -3.9 @ 25 °C
Adipic acid	3.16 L/kg ww	(Log Pow) 0.09 @ 25 °C
Potassium hydrogensulphate	No data available	Not applicable, inorganic
Dipotassium peroxodisulphate	Low potential for bioaccumulation (Log Pow < 3)	(Log Pow) -1 @ 20 °C
Boric acid	Bioaccumulation is not expected	(Log Pow) -1.09 @ 22 °C

12.4 Mobility in soil

Substances

Chemical Name	Adsorption/desorption
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	Not volatile, K _{oc} 0 L/kg @ 25 °C
Adipic acid	K _{oc} 1.61 @ 20 °C
Potassium hydrogensulphate	No data available
Dipotassium peroxodisulphate	Low potential for adsorption
Boric acid	Mobile in soils

12.5 Results of PBT and vPvB assessment

Not a PBT according to REACH Annex XIII

Not a vPvB according to REACH Annex XIII

SECTION 12: Ecological information (....)

12.6 Endocrine disrupting properties

Does not contain any substances with endocrine disrupting properties

12.7 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal should be in accordance with local, state or national legislation

This material and its container must be disposed of as hazardous waste

Do not discharge into drains or the environment, dispose to an authorised waste collection point

Do not reuse empty containers without commercial cleaning or reconditioning

13.2 Classification

The waste must be identified according to the List of Wastes (2000/532/EC)

Hazardous Property Code(s): HP 6 Acute Toxicity; HP 8 Corrosive; HP 13 Sensitising; HP 14 Ecotoxic

SECTION 14: Transport information

14.1 UN number or ID number

UN No.: 3260

14.2 UN proper shipping name

Proper Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (POTASSIUM PEROXIMONOSULPHATE)

14.3 Transport hazard class(es)

Hazard Class: 8

14.4 Packing group

Packing Group: II

14.5 Environmental hazards

Not classified

14.6 Special precautions for user

No information available

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

14.8 Road/Rail (ADR/RID)

ADR UN No.: 3260

SECTION 14: Transport information (....)

Proper Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (POTASSIUM PEROXIMONOSULPHATE)
ADR Hazard Class: 8
ADR Packing Group: II
Tunnel Code: (E)

14.9 Sea (IMDG)

IMDG UN No.: 3260
Proper Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (POTASSIUM PEROXIMONOSULPHATE)
IMDG Hazard Class: 8
IMDG Packing Group.: II

14.10 Air (ICAO/IATA)

ICAO UN No.: 3260
Proper Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (POTASSIUM PEROXIMONOSULPHATE)
ICAO Hazard Class: 8
ICAO Packing Group: II

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 (as amended by Regulation (EU) 2020/878) and UK REACH

The GB Classification, Labelling and Packaging Regulation (GB CLP) applies in Great Britain

Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe

This product is covered by the GB Biocidal Products Regulation (GB BPR)

This product is covered by the EU Biocides Regulation 528/2012 (EU BPR)

Restrictions on use according to Annex XVII to REACH Regulation: Entry 3 - Liquid substances or mixtures which are regarded as dangerous

Seveso III Directive (2012/18/EU, Dangerous Substances in Annex I: Not applicable

Boric acid is included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No.1907/2006 (REACH)

15.2 Chemical safety assessment

A REACH chemical safety assessment has not been carried out

SECTION 16: Other information

This 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. Such information is, to the best of PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.

Sources of data: Information from published literature and supplier safety data sheets

Revision No. 2.0.0. Revised September 2023.

Changes made: Updated to conform to latest version of REACH Annex II

SECTION 16: Other information (....)

Training advice

Workers must be informed of the presence of hazardous ingredients and trained in the proper use and handling of this product as required under applicable regulations

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4, H302:	Classification based on calculation and concentration thresholds
Skin Corr. 1B, H314:	Classification based on calculation and concentration thresholds
Skin Sens. 1, H317:	Classification based on calculation and concentration thresholds
Eye Dam. 1, H318:	Classification based on calculation and concentration thresholds
Resp. Sens. 1, H334:	Classification based on calculation and concentration thresholds
Aquatic Chronic 3, H412:	Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

H272: May intensify fire; oxidizer

H314: Causes severe skin burns and eye damage

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335: May cause respiratory irritation

H360FD: May damage fertility. May damage the unborn child.

H412: Harmful to aquatic life with long lasting effects

Acronyms

ATE: Acute Toxicity Estimate

CAS: Chemical Abstracts Service

DNEL: Derived No-Effect Level

EC: European Community

EC₅₀: Effective Concentration, 50%

GHS: Globally Harmonised System

LOAEL: Lowest Observed Adverse Effect Level

LC₅₀: Lethal Concentration, 50%

LD₅₀: Lethal Dose, 50%

NOAEC: No Observed Adverse Effect Concentration

NOAEL: No Observed Adverse Effect Level

OEL: Occupational Exposure Limit

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted No-Effect Concentration

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

SCL: Specific Concentration Limit

SECTION 16: Other information (....)

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

WEL: Workplace Exposure Limit