

## Sodium Persulphate Solution

### Section 1. Identification of Product and Company

**1.1 Identification of substance or preparation:** Sodium Persulphate Solution

**Synonyms:** Sodium Peroxodisulphate; Hydrogen Phosphate Solution and Water; Disodium Peroxodisulphate; Orthophosphoric Acid and Water

**1.2 Product Application:** This MSDS provides Health and Safety information from any Sodium persulphate component of the following vials or kits:

Altus Science Part Number	Product Name/Description/Range
(K) = Kit A-3591	From Sodium Persulphate and Phosphoric Acid solution

**1.3 Company/Undertaking Identification:**

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### Section 2. Hazards Identification

**2.1 Hazard Summary:**

**Physical hazards:** Contact with combustible material may cause fire

**Health hazards:** Harmful if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact

**Environmental hazards:** Not classified for hazards to the environment

**2.2 Label elements:**

**Contains:** Sodium persulphate, Phosphoric acid, Sucrose, Water

**Supplemental label information:** Not applicable

**2.3 Other hazards:** Not assigned

### Section 3. Composition/Information on Ingredients

**3.1 Mixtures:**

**Chemical description:** Aqueous solution of inorganic salts

Compound Name	CAS-No.	EC No.	Concentration	CLP Classification - Reg No.
Water	7732-18-5	231-791-2	≥82.9%	Not applicable
Sodium Persulphate	7775-27-1	231-892-1	≤12%	Ox. Sol. 3;H272, Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens 1;H317, Eye Irrit. 2;H319 Resp. Sens. 1;H334, STOT SE 3;H335
Phosphoric acid	7664-38-2	231-633-2	≤5.1%	Skin Corr. 1B;H314

## Section 4. First Aid Measures

### 4.1 Description of first aid measures:

**Skin Contact:** Remove contaminated clothing

Wash thoroughly with soap and water. If irritation persists, seek medical advice

**Eye Contact:** Flush eyes with water immediately. Seek medical attention

**Ingestion:** Immediately give 1-2 glasses of water if victim is conscious and induce vomiting

**Inhalation:** Remove to fresh air.

If breathing stops, provide artificial respiration.

For breathing difficulties, oxygen may be necessary

**4.2 Most important symptoms and effects, both acute and delayed:**Sensitisation  
Irritant effects

**4.3 Indication of any immediate medical attention and special treatment needed:** Not available

## Section 5. Fire Fighting Measures

### 5.1 Extinguishing media:

**Suitable Extinguishing Media:** Use extinguishing media appropriate for the surrounding materials.  
Carbon dioxide, dry chemicals, foam, water spray

**Unsuitable Extinguishing Media:** None

**5.2 Special hazards arising from the substance or mixture:**Toxic fumes may be released in fire  
Oxides of sulphur evolved in fire

### 5.3 Advice for fire-fighters:

**Special protective equipment for fire-fighters:** Self contained breathing apparatus.  
Protective clothing  
Helmet

**Special fire-fighting procedures:** Consider the hazards of other involved materials

**5.4 Further information:** No data available

## Section 6. Accidental Release Measures

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

**For non-emergency personnel:** Wear protective clothing, gloves and safety goggles

**For emergency responders:** Use personal protection recommended in Section 8 of the MSDS

**6.2 Environmental precautions:** Prevent from entering sewers or the immediate environment

### 6.3 Methods and materials for containment and clean up:

- Spills of the product could present a significant slip hazard depending on quantity and surface type
- Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local regulations
- Contain and recover by physical means
- Clean small spills by diluting with sufficient quantities of water

**6.4 Reference to other sections:** Please refer to Section 8 for further information

## Section 7. Handling and Storage

**7.1 Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety procedures  
Wash thoroughly after handling

**7.2 Conditions for safe storage, including any incompatibilities:**Reasonable and safe chemical storage.  
Store in a closed container in a cool, well-ventilated storage area, away from incompatible materials

**7.3 Specific end use(s):** For professional and industrial users only

## Section 8. Exposure Controls/Personal Protection

### 8.1 Control parameters

Occupational exposure limits - UK EH40 Workplace Exposure Limits (WEL's):

Components	Type	Value
Sodium persulphate (7775-27-1)	STEL	N/A
	TWA	N/A
Phosphoric acid (7664-38-2)	STEL	2mg/m3
	TWA	1mg/m3

### 8.2 Exposure controls:

**Biological Limit Values:** No biological exposure limits noted for the ingredient(s)

**Recommended monitoring procedures:** Not available

**Environmental exposure controls:** Not applicable

**Appropriate engineering controls:** Adequate ventilation to maintain air contaminants below exposure limits

**Personal protective equipment:**

**Eye/face protection:** Safety goggles

**Skin protection:** Neoprene gloves

**Body protection:** Protective clothing

**Respiratory protection:** In case of insufficient ventilation, use a breathing mask

## Section 9. Physical and Chemical Properties

### 9.1 Physical and Chemical Properties:

Characteristic	Description
<b>Appearance</b>	<i>Physical State</i>
	<i>Colour</i>
<b>Odour</b>	None
<b>Odour Threshold</b>	Not available
<b>pH (Concentrated product)</b>	< 6
<b>Melting point/freezing point</b>	Not available
<b>Initial boiling point and boiling range</b>	Not available
<b>Flash point</b>	>100,00°C Pensky Martens (CC)
<b>Evaporation rate</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable
<b>Flammable Limit - lower</b>	Not available
<b>Flammable Limit - upper</b>	Not available
<b>Vapour pressure</b>	18mm Hg
<b>Vapour density</b>	<1 (Air=1)
<b>Relative density</b>	1.19
<b>Water solubility</b>	Completely soluble
<b>Partition coefficient (n-Octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not applicable
<b>Decomposition temperature</b>	Not available
<b>Viscosity</b>	Not applicable
<b>Explosive properties</b>	Not available
<b>Oxidizing properties</b>	Not available

9.2 Other safety information: No relevant additional information available

## Section 10. Stability and Reactivity

- 10.1 Reactivity:** Not available
- 10.2 Chemical Stability:** Material is stable under normal conditions
- 10.3 Possibility of hazardous reactions:** Hazardous polymerisation does not occur
- 10.4 Conditions to avoid:** Keep away from heat  
Moisture  
Reducing agent
- 10.5 Incompatible materials:** Avoid contact with acids and alkalis  
Combustible material  
Oxidising material
- 10.6 Hazardous decomposition products:** Oxides of sulphur evolved in fire

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects:

Product/Component	LD50 Oral	LD50 Dermal
Sodium persulphate (Mixture)	Rat:>2980mg/kg (Calculated data)	Rabbit:>5000mg/kg (Calculated data)
Sodium persulphate	Acute Oral. Rat: 895mg/kg	Acute Dermal: Rabbit: 10000mg/kg
Phosphoric acid	Acute Oral: Rat: 1530mg/kg	Acute Dermal: Rabbit: 2740mg/kg

**Acute toxicity:** Harmful if swallowed

**Skin corrosion/irritation:** Causes skin irritation

**Respiratory or skin sensitisation:** May cause sensitisation by inhalation

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive toxicity:** Not classified

#### Information on likely routes of exposure:

**Ingestion:** May cause slight gastrointestinal irritation.  
May cause stomach pains/cramps, diarrhoea

**Inhalation:** May cause sensitisation.  
Irritation to respiratory system

**Skin contact:** May cause sensitisation.  
Causes irritation

**Eye contact:** Causes irritation

**Signs and symptoms of Exposure:** Not available

**Mixture versus substance information:** Not available

**Additional information:** Not available

## Section 12. Ecological Information

- 12.1 Toxicity:** No toxicity data noted for the ingredient(s)
- 12.2 Persistence and degradability:** No data available
- 12.3 Bio accumulative potential:** Not available
- 12.4 Mobility in soil:** Not available
- 12.5 Results of PBT and vPvB assessment:** Not available
- 12.6 Other adverse effects:** Not available
- 12.7 Summary:** The product is not classified as dangerous for the environment. The evaluation of the environmental hazards is based on the concentration limits set out in directive 1999/45/EC

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods:

**Product - According to Controlled Waste Regulations:**

European Waste Code (EWC) recommendation: 16 03 03

16 Wastes not otherwise specified in the list

16 03 Off-specification batches and unused products

16 03 03 Inorganic wastes containing dangerous substances

Depending on the origin and state of waster, other EWC numbers may be applicable too

**Contaminated packaging - According to Controlled Waste Regulations:**

European Waste Code (EWC) recommendation: 15 01 10

15 Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified

15 01 Packaging (including separately collected municipal packaging waste)

15 01 10 Packaging containing residues of or contaminated by dangerous substances

Depending on the origin and state of the waste, other EWC numbers may be applicable too

## Section 14. Transport Information

- 14.1 UN Number:**    **ADR/RID:** UN1760    **ADN:** UN1760    **IATA:** UN1760    **IMDG:** UN1760
- 14.2 UN proper shipping name:** Corrosive liquid n.o.s (Sodium persulphate, mixture)
- 14.3 Transport hazard classes:** 8
- 14.4 Packing group:** III
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user:** For IMDG, this substance is not intended to be transported in bulk

## Section 15. Regulatory Information

- 15.1 Safety, health and environment regulations/legislation specific for the substance or mixture:** No data available
- 15.2 Chemical safety assessment:** No data available
- 15.3 Other regulations:** This product does not need to be labelled in accordance with EC directives or respectivenational laws.

## Section 16. Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on present state of knowledge and is applicable to the product with regard to appropriate safety precautions. Altus Science Ltd shall not be held liable for any damage resulting from handling or from contact with the above product. Please refer to Terms and Conditions for further information of sale.

## Abbreviations

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

RID - International Rule for Transport of Dangerous Substances by Railway

ADN - International Carriage of Dangerous Goods by Inland Navigation

IATA - International Air transport Association

IMDG - International Maritime Dangerous Goods Code

WEL - Workplace Exposure Limit

TWA - Time weighted Average

STEL - Short-term Exposure Limit

vPvB - Very persistent, very Bio accumulative

H272 – May intensify fire; oxidiser

H302 – Harmful if swallowed

H315 – Causes skin irritation

H319 – Causes serious eye irritation

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

H335 – May cause respiratory irritation