

## 1 Identification

- **Product identifier**
- **Trade name:** Sodium Perchlorate Monohydrate, ACS
- **Article number:** 194862
- **CAS Number:**  
7791-07-3
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Research use only.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
United States  
www.mpbio.com
- **MP Biomedicals Australia Pty Limited**  
2/29 Bearing Road  
Seven Hills, NSW 2147 Aust.  
Telephone Number: (02) 9838 7422  
Fax Number: (02) 9838 7390  
www.mpbio.com
- **Further information obtainable from:** Quality Control Department
- **Emergency telephone number:**  
CHEMTREC: 1-800-424-9300 (1-703-527-3887)  
Australia Poison Control Centre: +61 13 11 26

## 2 Hazard(s) Identification

- **Classification of the substance or mixture**



flame over circle

Ox. Sol. 1 H271 May cause fire or explosion; strong oxidiser.



Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements**  
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS03



GHS07

- **Signal word** *Danger*

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**Trade name: Sodium Perchlorate Monohydrate, ACS**

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- **Hazard-determining components of labelling:**  
Sodium Perchlorate Monohydrate, ACS
- **Hazard statements**  
May cause fire or explosion; strong oxidiser.  
Harmful if swallowed.
- **Precautionary statements**  
If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.  
Keep away from heat. - No smoking.  
Take any precaution to avoid mixing with combustibles.  
Wear fire/flare resistant/retardant clothing.  
**IF ON CLOTHING:** rinse immediately contaminated clothing and skin with plenty of water before removing clothes.  
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**  
7791-07-3 Sodium Perchlorate Monohydrate, ACS

### 4 First Aid Measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** Not required.

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- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** 15-30°C
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Further information about storage conditions:**  
Desiccate.  
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye protection:** Not required.

### 9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

<b>Form:</b>	Crystalline
<b>Colour:</b>	Clear
<b>Odour:</b>	Indeterminate
<b>Odour threshold:</b>	Not determined.

- **pH-value:** Not applicable.

- **Change in condition**

<b>Melting point/freezing point:</b>	unknown °C
<b>Initial boiling point and boiling range:</b>	Undetermined.

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Product is not flammable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Not determined.

- **Explosive properties:** Product does not present an explosion hazard.  
Explosive when mixed with combustible material.

- **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

- **Vapour pressure:** Not applicable.

- **Density:** Not determined.

- **Relative density** Not determined.

- **Vapour density** Not applicable.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with**

- **water:** -  
Not determined.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

<b>Dynamic:</b>	Not applicable.
<b>Kinematic:</b>	Not applicable.

- **Solvent content:**

- **VOC (EC)** 0.00 %

- **Other information** No further relevant information available.

### 10 Stability and Reactivity

- **Reactivity** No further relevant information available.

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

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- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	2,100 mg/kg (rat)
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**7791-07-3 Sodium Perchlorate Monohydrate, ACS**

Oral	LD50	2,100 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

### 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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## 14 Transport information

<ul style="list-style-type: none"> <li>· UN-Number</li> <li>· ADG, IMDG, IATA</li> </ul>	<p style="text-align: right;">UN1502</p>
<ul style="list-style-type: none"> <li>· UN proper shipping name</li> <li>· ADG</li> <li>· IMDG, IATA</li> </ul>	<p style="text-align: right;">1502 SODIUM PERCHLORATE SODIUM PERCHLORATE</p>
<ul style="list-style-type: none"> <li>· Transport hazard class(es)</li> <li>· ADG, IMDG, IATA</li> </ul>	<div style="text-align: right;">  </div>
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p style="text-align: right;">5.1 Oxidising substances. 5.1</p>
<ul style="list-style-type: none"> <li>· Packing group</li> <li>· ADG, IMDG, IATA</li> </ul>	<p style="text-align: right;">II</p>
<ul style="list-style-type: none"> <li>· Environmental hazards:</li> </ul>	<p style="text-align: right;">Not applicable.</p>
<ul style="list-style-type: none"> <li>· Special precautions for user</li> <li>· Danger code (Kemler):</li> <li>· EMS Number:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> <li>· Segregation Code</li> </ul>	<p style="text-align: right;">Warning: Oxidising substances. 50 F-H,S-Q Perchlorates A SG38 Stow "separated from" ammonium compounds. SG49 Stow "separated from" cyanides</p>
<ul style="list-style-type: none"> <li>· Transport in bulk according to Annex II of Marpol and the IBC Code</li> </ul>	<p style="text-align: right;">Not applicable.</p>
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>	
<ul style="list-style-type: none"> <li>· ADG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p style="text-align: right;">1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g</p>
<ul style="list-style-type: none"> <li>· Transport category</li> <li>· Tunnel restriction code</li> </ul>	<p style="text-align: right;">2 E</p>
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p style="text-align: right;">1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g</p>
<ul style="list-style-type: none"> <li>· UN "Model Regulation":</li> </ul>	<p style="text-align: right;">UN 1502 SODIUM PERCHLORATE, 5.1, II</p>

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### 15 Regulatory information

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

· **Australian Inventory of Chemical Substances**

Substance is listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

Substance is not listed.

· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS03 GHS07

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

Sodium Perchlorate Monohydrate, ACS

· **Hazard statements**

May cause fire or explosion; strong oxidiser.

Harmful if swallowed.

· **Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat. - No smoking.

Take any precaution to avoid mixing with combustibles.

Wear fire/flamm resistant/retardant clothing.

**IF ON CLOTHING:** rinse immediately contaminated clothing and skin with plenty of water before removing clothes.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

· **Seveso category P8 OXIDISING LIQUIDS AND SOLIDS**

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Quality Control Dept.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

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**Trade name: Sodium Perchlorate Monohydrate, ACS***LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Ox. Sol. 1: Oxidizing solids – Category 1**Acute Tox. 4: Acute toxicity – Category 4*

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