

# Material Safety Data Sheet

## Sodium persulfate

ACC# 88474

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Sodium persulfate**Catalog Numbers:** AC202020000, AC202020010, AC202020050, AC202020250, AC202025000, BP2637-1, O6114-1, O6114-500**Synonyms:** Sodium peroxydisulfate; Disodium peroxodisulphate.**Company Identification:**Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

| CAS#      | Chemical Name     | Percent | EINECS/ELINCS |
|-----------|-------------------|---------|---------------|
| 7775-27-1 | Sodium persulfate | >98     | 231-892-1     |

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white crystalline powder.

**Danger!** Strong oxidizer. Contact with other material may cause a fire. Causes eye, skin, and respiratory tract irritation. May cause allergic respiratory and skin reaction. May be harmful if swallowed. Hygroscopic (absorbs moisture from the air).**Target Organs:** Respiratory system, eyes, skin.**Potential Health Effects****Eye:** Causes eye irritation.**Skin:** Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.**Inhalation:** Causes respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.**Chronic:** Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

### Section 4 - First Aid Measures

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.**Skin:** In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong oxidizer. Contact with other material may cause fire. Use water with caution and in flooding amounts. Decomposes at high temperatures, resulting in toxic and corrosive products.

**Extinguishing Media:** Deluge with water. Do not use carbon dioxide or other gas filled fire extinguishers; they will have no effect.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 1; Special Hazard: OX

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Keep from contact with clothing and other combustible materials. Do not breathe dust. Use only with adequate ventilation. Inform laundry personnel of contaminant's hazards. Do not take working clothes home.

**Storage:** Do not store near combustible materials. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from acids. Store protected from moisture. Avoid storage on wood floors.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

### Exposure Limits

| Chemical Name     | ACGIH  | NIOSH       | OSHA - Final PELs |
|-------------------|--|-------------|-------------------|
| Sodium persulfate | 0.1 mg/m <sup>3</sup> TWA (as Persulfate) (listed under Persulfates, inorganic, n.o.s.). | none listed | none listed       |

**OSHA Vacated PELs:** Sodium persulfate: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** white

**Odor:** odorless

**pH:** 5-7 (1% soln)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 100 deg C

**Decomposition Temperature:** 100 deg C

**Solubility:** Soluble.

**Specific Gravity/Density:** 2.6

**Molecular Formula:** Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>

**Molecular Weight:** 238.09

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Dust generation, moisture, excess heat.

**Incompatibilities with Other Materials:** Strong reducing agents, acids, strong bases, alcohols, finely powdered metals, organic materials, halides, combustible materials.

**Hazardous Decomposition Products:** Oxides of sulfur, oxygen.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:**

**CAS# 7775-27-1:** SE0525000

**LD50/LC50:**

Not available.

**Carcinogenicity:**

**CAS# 7775-27-1:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** The occurrence of frequent skin rashes, causing both irritant dermatitis & hypersensitivity reactions, was found in workers producing ammonium & potassium persulfates. The rashes were reduced by the use of protective clothing & gloves & improved dustremoval from the workplace air. Others reported asthma in hairdressers that was induced by exposure to persulfates.

**Teratogenicity:** No information found

**Reproductive Effects:** No information found

**Mutagenicity:** No information found

**Neurotoxicity:** No information found

**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Bluegill/Sunfish: 771mg/L; 96-hour; (FMC Study I92-1250)

Daphnia: Daphnia: 133mg/L; 48-hour; (FMC Study I92-1252)

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

|                       | US DOT            | Canada TDG        |
|-----------------------|-------------------|-------------------|
| <b>Shipping Name:</b> | SODIUM PERSULFATE | SODIUM PERSULFATE |
| <b>Hazard Class:</b>  | 5.1               | 5.1               |
| <b>UN Number:</b>     | UN1505            | UN1505            |
| <b>Packing Group:</b> | III               | III               |

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7775-27-1 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 7775-27-1: immediate, delayed, fire.

**Section 313** No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 7775-27-1 can be found on the following state right to know lists: New Jersey.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

XN O

**Risk Phrases:**

R 22 Harmful if swallowed.

R 42/43 May cause sensitization by inhalation and skin contact.

R 8 Contact with combustible material may cause fire.

**Safety Phrases:**

S 17 Keep away from combustible material.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 8 Keep container dry.

**WGK (Water Danger/Protection)**

CAS# 7775-27-1: 1

**Canada - DSL/NDSL**

CAS# 7775-27-1 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of C, D2A, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 7775-27-1 is not listed on the Canadian Ingredient Disclosure List.

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| <b>Section 16 - Additional Information</b> |
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**MSDS Creation Date:** 12/12/1997

**Revision #6 Date:** 6/29/2007

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