
MSDS Number: **S4730** * * * * *Effective Date: 09/09/08* * * * * *Supersedes: 08/20/08*

MSDS MATERIAL SAFETY DATA SHEET **CHEMTREC:** 800-424-9300 (USA)
 ----- 703-527-3887(Outside USA and Canada)
CANUTEC: 613-996-6666

From: Mallinckrodt Baker, Inc
 222 Red School Lane
 Phillipsburg, NJ 08865

NOTE: Use CHEMTREC and CANUTEC
 phone numbers only in the event
 of a chemical emergency.

Emergency Telephone Number: 908-859-2151

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

J. T. B A K E R

Sodium Persulfate

1. Product Identification

Synonyms: Sodium Peroxydisulfate; Peroxydisulfuric Acid, Disodium Salt

CAS No.: 7775-27-1

Molecular Weight: 238.03

Chemical Formula: Na₂O₈S₂

Product Codes: V035

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Peroxydisulfuric Acid Disodium Salt	7775-27-1	90 - 100%	Yes

3. Hazards Identification

Emergency Overview

DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE BURNS TO SKIN AND EYES. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION.

SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Life)

Flammability Rating: 1 - Slight

Reactivity Rating: 3 - Severe (Oxidizer)

Contact Rating: 3 - Severe (Life)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: Yellow (Reactive)

Potential Health Effects

There is limited information available on the hazards of this chemical. The health effects listed for this substance are based on information found for compounds of similar structure.

Inhalation:

Causes irritation to the respiratory tract. Symptoms may include sore throat, shortness of breath, inflammation of nasal passages, coughing, and wheezing. May cause lung edema, a medical emergency. Any exposure may cause an allergic reaction. Asthma-like symptoms and life-threatening shock may result.

Ingestion:

Causes severe irritation and possible burns to the mouth and throat. Gastrointestinal disturbances may be expected with nausea, abdominal pain, and vomiting.

Skin Contact:

Causes severe irritation or burns. Symptoms include redness, itching and pain. May cause allergic skin reactions.

Eye Contact:

Can cause severe irritation or burns with eye damage.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

Persons with impaired respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:

Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Heating or contact with water releases oxygen which may intensify combustion in an existing fire.

Explosion:

An explosion hazard when mixed with finely powdered organic matter, metal powder, or reducing agents. Strong oxidants may explode when shocked, or if exposed to heat, flame, or friction. Also may act as initiation source for dust or vapor explosions.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire. Do not use water.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Sealed containers may rupture when heated.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a

suitable container for reclamation or disposal, using a method that does not generate dust. Do not contact with water.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Avoid storage on wood floors. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

- ACGIH Threshold Limit Value (TLV):

0.1 mg/m³ (TWA), Persulfates, Sodium

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a full facepiece particulate respirator (NIOSH type N100 filters) may be worn for up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White powder.

Odor:

Odorless.

Solubility:

Appreciable (> 10%)

Specific Gravity:

2.40

pH:

6.0 (1% solution)

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

No information found.

Melting Point:

180C (356F) Decomposes.

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Unstable. Gradually decomposes losing oxygen. Decomposes more rapidly at higher temperatures. Stability decreases in the presence of moisture. Metals other than stainless steel are apt to cause decomposition of persulfate solutions.

Hazardous Decomposition Products:

Oxides of sulfur and the contained metal. Oxygen is released.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Reducing agents, organic material, sodium peroxide, water and powdered metals especially aluminum.

Conditions to Avoid:

Moisture, heat, flame, ignition sources, shock, friction, incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Peroxydisulfuric Acid Disodium Salt (7775-27-1)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: SODIUM PERSULFATE

Hazard Class: 5.1

UN/NA: UN1505

Packing Group: III

Information reported for product/size: 12KG

International (Water, I.M.O.)**Proper Shipping Name:** SODIUM PERSULFATE**Hazard Class:** 5.1**UN/NA:** UN1505**Packing Group:** III**Information reported for product/size:** 12KG**15. Regulatory Information**

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-----\Chemical Inventory Status - Part 1\-----
Ingredient                                     TSCA  EC   Japan  Australia
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Peroxydisulfuric Acid Disodium Salt (7775-27-1)  Yes  Yes  Yes    Yes

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-----\Chemical Inventory Status - Part 2\-----
Ingredient                                     Korea  DSL   NDSL  Phil.
-----
Peroxydisulfuric Acid Disodium Salt (7775-27-1)  Yes   Yes  No    Yes

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-----\Federal, State & International Regulations - Part 1\-----
Ingredient                                     -SARA 302-  -SARA 313-
RQ  TPQ  List  Chemical Catg.
-----
Peroxydisulfuric Acid Disodium Salt
(7775-27-1)  No   No   No    No

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-----\Federal, State & International Regulations - Part 2\-----
Ingredient                                     -RCRA-  -TSCA-
CERCLA  261.33  8(d)
-----
Peroxydisulfuric Acid Disodium Salt
(7775-27-1)  No      No      No

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Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No
Reactivity: No (Pure / Solid)

Australian Hazchem Code: 2P**Poison Schedule:** None allocated.**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information**NFPA Ratings:** Health: 3 Flammability: 0 Reactivity: 1 Other: **Oxidizer****Label Hazard Warning:**

DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. HARMFUL IF SWALLOWED OR INHALED. MAY CAUSE BURNS TO SKIN AND EYES. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION.

Label Precautions:

Keep from contact with clothing and other combustible materials.

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

Remove and wash contaminated clothing promptly.

Do not breathe dust.

Store in a tightly closed container.

Use only with adequate ventilation.

Wash thoroughly after handling.

Label First Aid:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In all cases get medical attention immediately.

Product Use:

Laboratory Reagent.

Revision Information:

MSDS Section(s) changed since last revision of document include: 3.

Disclaimer:

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Prepared by: Environmental Health & Safety

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