MSDS Number: **A6096** * * * * * *Effective Date:* ***01/11/08*** * * * * * *Supercedes:* ***04/15/05***

MSDS **Material Safety Data Sheet**

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

Mallinckrodt CHEMICALS | J.T.Baker

24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

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

AMMONIUM PERSULFATE

1. Product Identification

Synonyms: Ammonium Peroxydisulfate; Peroxydisulfuric Acid, Diammonium Salt; Diammonium peroxydisulfate
CAS No.: 7727-54-0
Molecular Weight: 228.20
Chemical Formula: (NH4)2S2O8
Product Codes:
J.T. Baker: 0762, 4030
Mallinckrodt: 3456, 3460, 7726

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Ammonium Persulfate	7727-54-0	98 - 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. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REACTION.

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

Health Rating: 2 - Moderate (Life)
Flammability Rating: 0 - None
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

Inhalation:
May irritate the mucous membranes. May cause lung edema. Symptoms may include sore throat, shortness of breath, inflammation of nasal passages, coughing, and wheezing. Any exposure may cause an allergic reaction. Asthma-like symptoms and life-threatening shock may result.
Ingestion:
Corrosive. May produce abdominal pain, nausea and vomiting.
Skin Contact:
Corrosive. May cause skin burns.
Eye Contact:
May cause severe irritation and pain.
Chronic Exposure:
Prolonged skin contact may cause an allergic reaction with dermatitis.
Aggravation of Pre-existing Conditions:
Persons with impaired respiratory function may be more susceptible to the effects of the substance.

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4. First Aid Measures

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

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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.
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.

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6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

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7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Separate from combustibles, organic or other readily oxidizable materials. Avoid storage on wood floors. 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.

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8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
- ACGIH Threshold Limit Value (TLV):
0.1 mg/m3 (TWA) as persulfate
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):
For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. 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-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:
Wear protective gloves and clean body-covering clothing.
Eye Protection:
Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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9. Physical and Chemical Properties

Appearance:
White crystals.
Odor:
Odorless.
Solubility:

80 g/l00 ml water @ 25C (77F)
Specific Gravity:
1.98 @ 20C/4C
pH:
No information found.
% Volatiles by volume @ 21C (70F):
0
Boiling Point:
Not applicable.
Melting Point:
120C (248F) Decomposes.
Vapor Density (Air=1):
No information found.
Vapor Pressure (mm Hg):
No information found.
Evaporation Rate (BuAc=1):
No information found.

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10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage. Stability decreases in the presence of moisture.
Hazardous Decomposition Products:
Decomposed by moisture to form oxygen and ozone. Burning may produce nitrogen oxides, sulfur oxides, and sulfuric acid.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Reducing agents, organic material, sodium peroxide, water and powdered metals especially aluminum.
Conditions to Avoid:
Moisture, combustible materials and incompatibles.

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11. Toxicological Information

Oral rat LD50: 689 mg/kg

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  --------\Cancer Lists\-----------------------------------------------------
-
                                          ---NTP Carcinogen---
  Ingredient                              Known    Anticipated    IARC
Category
```

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  ------------------------------------   -----    -----------    ------------
-
  Ammonium Persulfate (7727-54-0)         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: AMMONIUM PERSULFATE
Hazard Class: 5.1
UN/NA: UN1444
Packing Group: III
Information reported for product/size: 12KG

International (Water, I.M.O.)

Proper Shipping Name: AMMONIUM PERSULPHATE
Hazard Class: 5.1
UN/NA: UN1444
Packing Group: III
Information reported for product/size: 12KG

15. Regulatory Information

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  --------\Chemical Inventory Status - Part 1\-------------------------------
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  Ingredient                                          TSCA  EC   Japan
Australia
  ----------------------------------------------  ----  ---  -----  --------
-
  Ammonium Persulfate (7727-54-0)                   Yes  Yes   Yes      Yes

  --------\Chemical Inventory Status - Part 2\-------------------------------
--
                                                              --Canada--
  Ingredient                                          Korea  DSL   NDSL  Phil.
  ----------------------------------------------  -----  ---   ----  -----
  Ammonium Persulfate (7727-54-0)                   Yes   Yes   No     Yes

  --------\Federal, State & International Regulations - Part 1\--------------
--
                                              -SARA 302-    ------SARA 313----
--
  Ingredient                                  RQ    TPQ     List  Chemical
Catg.
  ----------------------------------------  ---   -----   ----  ------------
--
  Ammonium Persulfate (7727-54-0)           No    No      No         No

  --------\Federal, State & International Regulations - Part 2\--------------
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                                                          -RCRA-    -TSCA-
  Ingredient                                  CERCLA     261.33     8(d)
  ----------------------------------------  ------     ------    ------
  Ammonium Persulfate (7727-54-0)           No         No         No


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

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16. Other Information

NFPA Ratings: Health: **2** 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. 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.
Do not breathe dust.
Store in a tightly closed container.
Use with adequate ventilation.
Wash thoroughly after handling.

Label First Aid:

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

Product Use:

Laboratory Reagent.

Revision Information:

MSDS Section(s) changed since last revision of document include: 8.

Disclaimer:

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