



# Material Safety Data Sheet

Catalog Number: 802829  
Revision date: 26-Apr-2006

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 802829

Product name: AMMONIUM PERSULFATE

Synonyms: Ammonium Peroxydisulfate

**Supplier:**

MP Biomedicals, LLC  
29525 Fountain Parkway  
Solon, OH 44139  
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
AMMONIUM PERSULFATE	7727-54-0	90 - 100%	0.1 mg/m <sup>3</sup> TWA	None

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Harmful by inhalation, in contact with skin and if swallowed., Contact with combustible material may cause fire

**Category of Danger:**

Oxidizer , Harmful

**Principle routes of exposure:** Skin

**Inhalation:** Harmful by inhalation.

**Ingestion:** Harmful if swallowed.

**Skin contact:** Harmful in contact with skin.

**Eye contact:** Risk of serious damage to eyes

**Statements of hazard** HARMFUL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR INHALED.

May cause fires.

**Statement of Spill or Leak - ANSI Label** Eliminate all ignition sources. Absorb and/or contain spill with inert materials (e.g., sand, vermiculite). Then place in appropriate container. For large spills, use water spray to disperse vapors, flush spill area. Prevent runoff from entering waterways or sewers.

**Statement of First Aid** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

**Precautions - ANSI Label** Do not taste or swallow. Wash thoroughly after handling. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid breathing vapors. Avoid contact with skin, eyes and clothing

#### 4. FIRST AID MEASURES

**General advice:** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Inhalation:** Move to fresh air. Call a physician immediately.

**Skin contact:** Rinse immediately with plenty of water and seek medical advice

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician Drink 1 or 2 glasses of water. Induce vomiting, but only if victim is fully conscious. Obtain medical attention.

**Eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Protection of first-aiders:** No information available

**Medical conditions aggravated by exposure:** None known

#### 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray or `alcohol` foam.

**Specific hazards:**

Burning produces irritant fumes.

**Unusual hazards:**

None known

**Special protective equipment for firefighters:**

Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes.

**Specific methods:**

Water mist may be used to cool closed containers.

**Flash point:**

Not determined

**Autoignition temperature:**

Not determined

**NFPA rating:**

NFPA Health:	2
NFPA Flammability:	2
NFPA Reactivity:	1
NFPA Special Note:	ox

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Use personal protective equipment.

**Environmental precautions:**

Prevent product from entering drains.

**Methods for cleaning up:**

Sweep up and shovel into suitable containers for disposal.

#### 7. HANDLING AND STORAGE

**Storage:**

ROOM TEMPERATURE  
DESICCATE

**Handling:**

Use only in area provided with appropriate exhaust ventilation.

**Safe handling advice:**

Wear personal protective equipment. Remove and wash contaminated clothing before reuse.

**Technical measures/storage conditions:**

Keep containers tightly closed in a cool, well-ventilated place. Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition For safety reasons in case of fire, cans should be stored separately in closed containments. Do not expose material to high temperatures, changes in pressure or sudden shock. Keep away from contact with clothing and other combustible materials.

**Incompatible products:**

Oxidising and spontaneously flammable products

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure adequate ventilation, especially in confined areas.

### PERSONAL PROTECTIVE EQUIPMENT

**Respiratory protection:** In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

**Hand protection:** Pvc or other plastic material gloves

**Skin and body protection:** Impervious clothing

**Eye protection:** If splashes are likely to occur, wear: Safety glasses with side-shields

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Odor</b>	colorless to light straw solid; mild unpleasant odor
<b>Physical state:</b>	Powder
<b>Formula:</b>	H3N•1/2H2O8S2
<b>Molecular weight:</b>	228.18
<b>Melting point/range:</b>	120 °C with decomposition
<b>Boiling point/range:</b>	No Data available at this time.
<b>Density:</b>	950 - 1050 kg/m <sup>3</sup> (bulk density)
<b>Vapor pressure:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Vapor density:</b>	No data available
<b>Solubility (in water):</b>	Soluble
<b>Flash point:</b>	Not determined
<b>Autoignition temperature:</b>	Not determined

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Polymerization:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Nitrogen oxides (NOx)/ammonia/CN <sup>-</sup> , Sulphur oxides
<b>Materials to avoid:</b>	-
	A strong oxidizer. Reacts violently with reducing agents, aluminum powder, iron. Mixture with sodium peroxide produces a friction-, heat-, and water-sensitive explosive.
<b>Conditions to avoid:</b>	Exposure to air or moisture over prolonged periods.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

#### Acute toxicity

Components

AMMONIUM PERSULFATE

**RTECS Number:**

SE0350000

**Selected LD50s and LC50s**

Oral LD50 Rat : 689 mg/kg

#### Chronic toxicity:

Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.

#### Local effects:

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

#### Specific effects:

May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.

#### Primary irritation:

No data is available on the product itself.

#### Carcinogenic effects:

No data is available on the product itself.

#### Mutagenic effects:

No data is available on the product itself.

#### Reproductive toxicity:

No data is available on the product itself.

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## 12. ECOLOGICAL INFORMATION

**Mobility:** No data available  
**Bioaccumulation:** No data available  
**Ecotoxicity effects:** No data available  
**Aquatic toxicity:** May cause long-term adverse effects in the aquatic environment.

<b>Components</b> AMMONIUM PERSULFATE	<b>U.S. DOT - Appendix B - Marine Pollutan</b> Not Listed	<b>U.S. DOT - Appendix B - Severe Marine Pollutants</b> Not Listed	<b>United Kingdom - The Red List:</b> Not Listed
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<b>Components</b> AMMONIUM PERSULFATE	<b>Germany VCI (WGK)</b> 1	<b>World Health Organization (WHO) - Drinking Water</b> Not Listed	<b>Ecotoxicity - Fish Species Data</b> Not Listed
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<b>Components</b> AMMONIUM PERSULFATE	<b>Ecotoxicity - Freshwater Algae Data</b> Not Listed	<b>Ecotoxicity - Microtox Data</b> Not Listed	<b>Ecotoxicity - Water Flea Data</b> Not Listed
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<b>Components</b> AMMONIUM PERSULFATE	<b>EPA - ATSDR Priority List</b> Not Listed	<b>EPA - HPV Challenge Program Chemical List</b> Not Listed	<b>California - Priority Toxic Pollutants</b> Not Listed
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<b>Components</b> AMMONIUM PERSULFATE	<b>California - Priority Toxic Pollutants</b> Not Listed	<b>California - Priority Toxic Pollutants</b> Not Listed
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## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:** Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

**Contaminated packaging:** Do not re-use empty containers

## 14. TRANSPORT INFORMATION

**UN/Id No:** 1444

**DOT:**

**Proper shipping name:** Ammonium persulphate  
**IATA Hazard Label(s):** Oxidizer  
**Hazard Class:** 5.1 - Oxidizers  
**Packing group:** III

**Emergency Response Guide Number (ERG):** 140

<b>Components</b> AMMONIUM PERSULFATE	<b>U.S. DOT - Appendix A Table 1 - Reportable Quantities</b> Not Listed
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**TDG (Canada):**

**WHMIS hazard class:**

C oxidizing materials  
D2b toxic materials



**IMDG/IMO**

**Proper shipping name:**

Ammonium persulphate

**IMDG - Hazard Classifications**  
**IMDG - Regulated Substances**

IMDG class or division = 5.1  
UN1444

**Components**

**U.S. DOT - Appendix B - Marine Pollutan**    **U.S. DOT - Appendix B - Severe Marine**  
**Pollutants**  
AMMONIUM PERSULFATE    Not Listed    Not Listed

**IMO-labels:**

**15. REGULATORY INFORMATION**

**International Inventories**

**Components**

AMMONIUM PERSULFATE

<b>Inventory - United States TSCA - Sect. 8(b)</b>	Present
<b>Canada DSL Inventory List -</b>	Present
<b>Australia (AICS):</b>	Present
<b>Inventory - China:</b>	Present
<b>EU EINECS List -</b>	231-786-5; H3N.1/2H2O8S2
<b>Inventory - Japan:</b>	1-406
<b>Korean KECL:</b>	KE-09815
<b>Philippines PICCS:</b>	Present

**U.S. regulations:**

<b>Components</b>	<b>California Proposition 65</b>	<b>Massachusetts Right to Know List:</b>	<b>New Jersey Right to Know List:</b>	<b>Pennsylvania Right to Know List:</b>
AMMONIUM PERSULFATE	- Not Listed	Not Listed	sn 0111	Not Listed

<b>Components</b>	<b>Florida substance List:</b>	<b>Rhode Island Right to Know List:</b>	<b>Illinois - Toxic Air Contaminants</b>	<b>Connecticut - Hazardous Air Pollutants</b>
AMMONIUM PERSULFATE	Not Listed	Not Listed	Not Listed	Not Listed

<b>Components</b>	<b>SARA 313 Emission reporting/Toxic Release of Chemicals</b>	<b>CERCLA/SARA - Section 302 Extremely Haz</b>	<b>NTP:</b>	<b>IARC:</b>
AMMONIUM PERSULFATE	Not Listed	Not Listed	None	None

**SARA 313 Notification:**

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

**State Notification:**

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

<b>16. OTHER INFORMATION</b>
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**Prepared by:** Health & Safety

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**End of Safety Data Sheet**