

ACROS

ORGANICS

Material Safety Data Sheet

Creation Date 10-Dec-2009

Revision Date 10-Dec-2009

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

| | | |
|---|--|---|
| Product Name | Ammonium persulfate | |
| Cat No. | AC201530000; AC201530010; AC201530050; AC201531000 | |
| Synonyms | Ammonium peroxydisulfate | |
| Recommended Use | Laboratory chemicals | |
| Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 | Entity / Business Name Acros Organics One Reagent Lane Fair Lawn, NJ 07410 | Emergency Telephone Number For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52 11 Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 201-796-7100 CHEMTREC Phone Number, US: 800-424-9300 CHEMTREC Phone Number, Europe: 703-527-3887 |

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Oxidizer: Contact with combustible/organic material may cause fire. Harmful if swallowed. Causes eye, skin, and respiratory tract irritation. May cause allergic respiratory and skin reaction.

Appearance White

Physical State Powder

Odor odorless

Target Organs Respiratory system, Eyes, Skin

Potential Health Effects

Acute Effects

Principle Routes of Exposure

| | |
|-------------------|---|
| Eyes | Irritating to eyes. |
| Skin | Irritating to skin. May be harmful in contact with skin. May produce an allergic reaction. |
| Inhalation | Irritating to respiratory system. May cause allergic respiratory reaction. May be harmful if inhaled. |
| Ingestion | Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Chronic Effects Repeated contact may cause allergic reactions in very susceptible persons.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

| Component | CAS-No | Weight % |
|---------------------|-----------|----------|
| Ammonium persulfate | 7727-54-0 | 98 |

4. FIRST AID MEASURES

| | |
|---------------------------|---|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required. |
| Inhalation | Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required. |
| Ingestion | Do not induce vomiting. Call a physician or Poison Control Center immediately. |
| Notes to Physician | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

| | |
|---|--|
| Flash Point | No information available. |
| Method | No information available. |
| Autoignition Temperature | No information available. |
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Suitable Extinguishing Media | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable Extinguishing Media | No information available. |
| Hazardous Combustion Products | No information available. |
| Sensitivity to mechanical impact | No information available. |
| Sensitivity to static discharge | No information available. |

Specific Hazards Arising from the Chemical

Oxidizer: Contact with combustible/organic material may cause fire. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA **Health 2** **Flammability 1** **Instability 2** **Physical hazards OX**

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.
- Environmental Precautions** Should not be released into the environment.
- Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Keep combustibles (wood, paper, oil, etc) away from spilled material.

7. HANDLING AND STORAGE

- Handling** Use only under a chemical fume hood. Wear personal protective equipment. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Keep away from clothing and other combustible materials.
- Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------|----------------------------|----------|------------|
| Ammonium persulfate | TWA: 0.1 mg/m ³ | | |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWA EV |
|---------------------|--------|------------------|----------------------------|
| Ammonium persulfate | | | TWA: 0.1 mg/m ³ |

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

- Eye/face Protection** 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 and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure
- Respiratory Protection** 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

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------------|---------------------------|
| Physical State | Powder |
| Appearance | White |
| Odor | odorless |
| Odor Threshold | No information available. |
| pH | 3.2 100 g/L |
| Vapor Pressure | negligible |
| Vapor Density | No information available. |
| Viscosity | No information available. |
| Boiling Point/Range | No information available. |
| Melting Point/Range | 120°C / 248°F |
| Decomposition temperature °C | 120 |
| Flash Point | No information available. |
| Evaporation Rate | negligible |
| Specific Gravity | 1.980 |
| Solubility | Soluble in water |
| log Pow | No data available |
| Molecular Weight | 228.19 |
| Molecular Formula | H8 N2 O8 S2 |

10. STABILITY AND REACTIVITY

| | |
|---|---|
| Stability | Oxidizer: Contact with combustible/organic material may cause fire. Moisture sensitive. |
| Conditions to Avoid | Combustible material. Excess heat. Exposure to moisture. |
| Incompatible Materials | Reducing agents, Metals, Peroxides, Strong oxidizing agents |
| Hazardous Decomposition Products | Nitrogen oxides (NOx), Sulfur oxides, Ammonia |
| Hazardous Polymerization | Hazardous polymerization does not occur |
| Hazardous Reactions . | None under normal processing. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------|-------------------|-------------|----------------------|
| Ammonium persulfate | 495 mg/kg (Rat) | Not listed | 520 mg/L (Rat) 1 h |

Irritation Irritating to eyes, respiratory system and skin

Toxicologically Synergistic Products No information available.

Chronic Toxicity

| | |
|--|---|
| Carcinogenicity | There are no known carcinogenic chemicals in this product |
| Sensitization | May cause sensitization by inhalation and skin contact |
| Mutagenic Effects | No information available. |
| Reproductive Effects | No information available. |
| Developmental Effects | No information available. |
| Teratogenicity | No information available. |
| Other Adverse Effects | The toxicological properties have not been fully investigated.. See actual entry in RTECS for complete information. |
| Endocrine Disruptor Information | No information available |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---------------------|------------------|-----------------|------------|--------------------|
| Ammonium persulfate | Not listed | Not listed | Not listed | EC50 48 h 120 mg/L |

| | |
|--------------------------------------|--------------------------|
| Persistence and Degradability | No information available |
| Bioaccumulation/ Accumulation | No information available |
| Mobility | No information available |

13. DISPOSAL CONSIDERATIONS

| | |
|-------------------------------|--|
| Waste Disposal Methods | Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification |
|-------------------------------|--|

14. TRANSPORT INFORMATION

DOT

| | |
|-----------------------------|---------------------|
| UN-No | UN1444 |
| Proper Shipping Name | AMMONIUM PERSULFATE |
| Hazard Class | 5.1 |
| Packing Group | III |

14. TRANSPORT INFORMATION

TDG

UN-No UN1444
 Proper Shipping Name AMMONIUM PERSULFATE
 Hazard Class 5.1
 Packing Group III

IATA

UN-No UN1444
 Proper Shipping Name AMMONIUM PERSULPHATE
 Hazard Class 5.1
 Packing Group III

IMDG/IMO

UN-No UN1444
 Proper Shipping Name AMMONIUM PERSULPHATE
 Hazard Class 5.1
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | CHINA | KECL |
|---------------------|------|-----|------|-----------|--------|-----|-------|------|------|-------|---------------|
| Ammonium persulfate | X | X | - | 231-786-5 | - | | X | X | X | X | KE-09815 X |

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---------------------|-----------|----------|-------------------------------|
| Ammonium persulfate | 7727-54-0 | 98 | 1.0 |

SARA 311/312 Hazardous Categorization

Acute Health Hazard No
 Chronic Health Hazard No
 Fire Hazard No
 Sudden Release of Pressure Hazard No
 Reactive Hazard No

Clean Water Act

Not applicable

Clean Air Act

Not applicable

OSHA

Not applicable

CERCLA

Not Applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------------|---------------|------------|--------------|----------|--------------|
| Ammonium persulfate | - | X | - | - | - |

U.S. Department of Transportation

Reportable Quantity (RQ): N
 DOT Marine Pollutant N
 DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

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

WHMIS Hazard Class

C Oxidizing materials
 D2A Very toxic materials
 D2B Toxic materials



16. OTHER INFORMATION

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Revision Summary "****", and red text indicates revision

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS