

# MATERIAL SAFETY DATA SHEET

# SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION\_

# Product name: AMMONIUM PERSULFATE

- **Manufacturer:** Deep South Chemical, Inc.
  - 229 Millstone Road

Broussard, LA 70518 (337) 837-9931

• For Emergency : Call CHEMTREC 1-800-424-9300 Outside the U.S.A. (703)-527-3887

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- Chemical Family: OXIDIZER
- Contact Person: Glenn Ray
- Formula:  $(NH_4)_2 S_2 O_8 (95-98\%)$
- MSDS Revised: January 1, 2014

# SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

|                      |            |     | PEL(OSHA) |      | TLV(ACGIH) |      |      |
|----------------------|------------|-----|-----------|------|------------|------|------|
| Hazardous components | CAS Number | %   | TWA       | STEL | TWA        | STEL | IDLH |
| Ammonium Persulfate  | 7727-54-0  | 95+ | N/E       | N/E  | N/E        | N/E  | N/E  |

# SECTION 3. HAZARDS IDENTIFICATION, INCLUDING EMERGENCY OVERVIEW

Effects of overexposure

**Inhalation:** This product may cause irritation to nose, throat, and respiratory tract **Skin Contact:** This product may cause irritation to the skin. **Eye Contact:** Irritation to eyes.

Ingestion: There may be irritation of the mouth, throat, and digestive tract.

# SECTION 4. FIRST AID MEASURES

- **Eyes:** Move victim away form exposure and into fresh air. If irritation persists, seek medical attention. For direct exposure, flush with clean water for 15 minutes. Hold eyelids apart to ensure flushing of the entire eye surface.
- **Inhalation:** Move victim away form source of exposure and into fresh air. If irritation persists, seek medical attention. If victim is not breathing, artificial respiration should be administered.
- **Skin:** Remove contaminated clothes. Cleanse affected area thoroughly with soap and water. If irritation persists, seek medical attention. Wash contaminated clothing.

Ingestion: Seek medical attention.

# SECTION 5. FIRE FIGHTING MEASURES

# **Fire fighting measures**

**Extinguishing Media:** Deluge with water, Do not use Carbon Dioxide or other gas filled fire extinguishers.

**Decomposition/Combustion Products:** Ammonium persulfate is not combustible; however, it evolves oxygen on heating and/or contact with water and thus may intensify combustion in a fire situation. It is an explosion hazard when mixed with finely powdered organic matter, metal, powder, or reducing agents. Sealed containers can rupture when heated in a fire situation.

#### **Explosive Properties:**

LEL: N/D UEL: N/D



# SECTION 6. ACCIDENTAL RELEASE MEASURES

- **Steps to be taken if material is released or spilled:** Use proper personal protective equipment. Stay upwind from spill. For small dry spills, carefully scoop material into suitable containers for later disposal. Small amounts of scrap can be mixed with an excess of concentrated hyposolution (acidified with dilute sulfuric acid) to reduce; then, after neutralization with soda ash, flushed with an excess of water to the holding tank.
- **Waste disposal method:** Dispose of according to local, state and federal regulations in an approved disposal facility or recycling facility.

#### SECTION 7. HANDLING AND STORAGE

- Storage: Store in a well-ventilated area. Keep container tightly closed when not in use. Store in cool, dry area.
- **Handling:** Use proper personal protective equipment. Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well-ventilated workspace. When handling do not eat, drink, or smoke.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Keep work area well ventilated.

Protective clothing: Impermeable gloves and impervious clothing as appropriate.

Eye protection: Chemical goggles where splashing may occur.

**Respiratory Protection:** Use appropriate respiratory protection when handling or in case of insufficient ventilation.

**Special Protection:** Safety shower, eye bath, and washing facilities should be available.

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity @ 77°F(H<sub>2</sub>O = 1): 1.982 Flash Point(PMCC Method)(°F): N/D Vapor density (Air = 1): N/A Solubility: 58g/100ml water @ 32°F Vapor pressure @ 320°F: N/A Evaporation Rate: N/A Appearance: White Crystals Odor: None Boiling Point(°F) : N/A Melting Point(°F) : N/D Viscosity: N/D pH: In a 1.0% aqueous solution is typically 4-6 Auto-ignition: Non-combustible

# SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity: Stable in normal conditions.

**Incompatible Materials:** This material is a strong oxidizing agent that can react vigorously with reducing agents and organic material. Catalytic decomposition may occur in the presence of metals such as lead, silver, copper, magnesium, zinc, cadmium, nickel, iron, and cobalt.

**Hazardous Decomposition Products:** It will decompose to form oxygen on heating; decomposition is rapid at about 248°F but is not reported to be violent or explosive. **Hazardous Polymerization:** None described.

# SECTION 11. TOXICOLOGICAL INFORMATION\_

Rat, oral, LD<sub>50</sub>: 600 mg/kg



# SECTION 12. ECOLOGICAL INFORMATION

**Environmental Fate:** Biodegradability does not apply to inorganic substances. No other fate data is available.

Environmental Toxicity: Bluegill sunfish 96-hour LC50=103mg/L Rainbow trout 96-hour LC 50= 76.3mg/L Daphnia 48-hour LC 50= 120mg/L Grass shrimp 96-hour LC 50= 391mg/L

#### SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal:** If spilled, dispose according to local, state, and federal regulations. Recycle waste containers and clean out residues.

#### SECTION 14. TRANSPORT INFORMATION

### <u>DOT Transport Information</u>: UN 1444, Ammonium Persulfate, 5.1, PG III <u>DOT Placard</u>: Oxidizer

#### SECTION 15. REGULATORY INFORMATION

**Toxic Substances Control Act (TCSA):** All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CERCLA RQ-40 CFR 302.4(a) <u>Component</u> None

CERCLA RQ(lbs.)

SARA 302 Components-40 CFR 355 Appendix A None

Section 311/312 Hazard Class-40 CFR 370.2 Immediate (X)

Delayed () Fire (X) Reactive () Sudden Release of Pressure ()

SARA 313-40 CFR 372.65

Component None <u>%</u>

# SECTION 16. OTHER INFORMATION

NFPA RATING: Health (1) Fire (0) Reactivity (1)

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CAS Number

N/D= No data; N/A = Not available; N/E= Not established