# SAFETY DATA SHEET

LANXESS
Energizing Chemistry

## Section 1. Identification

**Product identifier** : AS COARSE SOLID CPL

**Material Number** : 56332220

**Chemical name** : Sulfuric acid diammonium salt

**Identified uses** : chemical agent

**Supplier/Manufacturer** : LANXESS Corporation
Product Safety & Regulatory Affairs
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112
USA

For information: US/Canada (800) LANXESS
International +1 412 809 1000

**In case of emergency** : Chemtrec (800) 424-9300
International (703) 527-3887
Lanxess Emergency Phone (800) 410-3063.

## Section 2. Hazards identification

**HAZCOM Standard Status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), the SDS contains valuable information critical to the safe handling and proper use of the product. The SDS should be retained and available for employees and other users of this product.

**Physical state** : Solid.

**Color** : White.

**Classification of the substance or mixture** : Not classified.

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

**Hazard Not Otherwise Classified (HNOC)** : None known.

**Precautionary statements**

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Supplemental label elements** : Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

**Chemical name** : Sulfuric acid diammonium salt

| Ingredient name | % | CAS number |
|---|---|---|
| Sulfuric acid diammonium salt | 95 - 100% | 7783-20-2 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

## Section 3. Composition/information on ingredients

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

### Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : May be harmful if swallowed.

### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

### Potential chronic health effects

No known significant effects or critical hazards.

**Notes to physician** : Treat symptomatically. No specific treatment.

**Protection of first-aiders** : No special measures required.

**See toxicological information (Section 11)**

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
nitrogen oxides
sulfur oxides
ammonia

## Section 5. Fire-fighting measures

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

**Conditions for safe storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers or liners may retain some product residues.

## Section 8. Exposure controls/personal protection

### Occupational exposure limits

No exposure limit value known.

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Personal protection

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Respiratory protection** : NIOSH approved, air-purifying particulate respirator with N-95 filters.

**Skin protection** : Permeation resistant gloves.

**Eye/face protection** : If contact with product is possible, wear safety glasses with side shields.

**Medical Surveillance** : Not available.

## Section 9. Physical and chemical properties

**Physical state** : Solid.

**Color** : White.

**Odor** : Odorless.

**Odor threshold** : Not available.

**pH** : 5 [Conc. (% w/w): 10%]

**Boiling point** : Not available.

**Melting point** : Decomposition temperature: >235°C (>455°F)

**Flash point** : Not available.

**Evaporation rate** : Not available.

**Explosion limits** : Not available.

**Vapor pressure** : Not available.

**Density** : 1.77 g/cm³

**Specific gravity (Relative density)** : Not available.

**Bulk density** : 1000 kg/m³

**Solubility** : 754 g/l (water)

**Solubility** : Easily soluble in the following materials: cold water

**Partition coefficient: n-octanol/water** : Not available.

**Vapor density** : Not available.

**Viscosity** : Not available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : >235°C

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : May react under flame formation or even explosively at room temperature with nitrites

**Incompatible materials** : Keep away from: alkalis and nitrates

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : May be harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

**Potential chronic health effects**

# Section 11. Toxicological information

## Short term exposure

**Potential immediate effects** : Not available.

## Long term exposure

**Potential delayed effects** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure | Test |
|---|---|---|---|---|---|
| Sulfuric acid diammonium salt | LD50 Oral | Rat - Male, Female | 4250 mg/kg | - | OECD 401 Acute Oral Toxicity |
| Sulfuric acid diammonium salt | LD50 Dermal | Rat - Male, Female | >2000 mg/kg | - | 434 Acute Dermal Toxicity-Fixed Dose Procedure * |
| Sulfuric acid diammonium salt | LC50 Inhalation Dusts and mists | Rat - Male | 1000 to 1200 mg/m³ | 8 hours | * |
| | LC50 Inhalation Dusts and mists | Rat - Male | >3.6 mg/m³ | 4 hours | OECD 433 Acute Inhalation Toxicity-Fixed Dose Procedure * |

**Conclusion/Summary** : * Dosage caused no mortality

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation | Reversibility |
|---|---|---|---|---|---|---|
| Sulfuric acid diammonium salt | Eyes - Redness of the conjunctivae | Rabbit | 0.33 | - | 8 days | Fully reversible in more than 7 days |
| | Eyes - Iris lesion | Rabbit | 0 | - | 8 days | - |
| | Eyes - Edema of the conjunctivae | Rabbit | 0 | - | 8 days | - |
| | Eyes - Cornea opacity | Rabbit | 0 | - | 8 days | - |
| | Skin - Erythema/Eschar | Rabbit | 1 | 20 hours | 8 days | Fully reversible in 7 days or less |
| | Skin - Edema | Rabbit | 0 | 20 hours | 8 days | - |

### Conclusion/Summary

**Skin** : Sulfuric acid diammonium salt:Non-irritating

**Eyes** : Sulfuric acid diammonium salt:Non-irritating

# Section 11. Toxicological information

## Sensitization

| Product/ingredient name | Route of exposure | Species | Result |
|---|---|---|---|
| Sulfuric acid diammonium salt | skin | Guinea pig | Not sensitizing |

## Chronic toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Sulfuric acid diammonium salt | Sub-acute NOAEC Inhalation Dusts and mists | Rat - Male | 300 mg/m³ | 14 days; 8 hours per day |

## Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|---|
| Sulfuric acid diammonium salt | OECD 471 Bacterial Reverse Mutation Test | Experiment: In vitro<br>Subject: Bacteria<br>Metabolic activation: +/- | Negative |
| | OECD 476 *In vitro* Mammalian Cell Gene Mutation Test | Experiment: In vitro<br>Subject: Mammalian-Animal<br>Cell: Somatic<br>Metabolic activation: +/- | Negative |
| | Chromosomal aberration assay | Experiment: In vitro<br>Subject: Mammalian-Animal<br>Cell: Somatic | Negative |

## Carcinogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Sulfuric acid diammonium salt | Negative - Oral - NOAEL | Rat - Female | 284 mg/kg | 102 weeks |

| Product/ingredient name | CAS # | IARC | NTP | OSHA |
|---|---|---|---|---|
| Sulfuric acid diammonium salt | 7783-20-2 | Not classified. | Not classified. | Not classified. |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Test | Result | Species | Exposure |
|---|---|---|---|---|
| Sulfuric acid diammonium salt | - | Acute EC50 168.8 mg/l | Daphnia | 48 hours |
| | - | Acute IC50 2700 mg/l | Algae - Chlorella vulgaris | 18 days |
| | - | Acute LC50 53 mg/l | Fish - Oncorhynchus mykiss | 96 hours |
| | - | Chronic EC10 3.12 mg/l | Daphnia | 10 weeks |
| | - | Chronic EC10 5.29 mg/l | Fish - Lepomis macrochirus | 30 days |

**Conclusion/Summary** : Not available.

## Persistence and degradability

**Conclusion/Summary** : Not available.

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Sulfuric acid diammonium salt | -5.1 | - | low |

## Section 12. Ecological information

**Mobility in soil**

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal state, provincial and or local environmental controls laws.

**RCRA classification** : : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

## Section 14. Transport information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|---|---|---|---|---|---|---|
| DOT Classification | - | - | - | - | | Not regulated. |
| IMDG Class | - | - | - | - | | Not regulated. |
| IATA-DGR Class | - | - | - | - | | Not regulated. |

PG* : Packing group

**RQ** : 0 lbs

## Section 15. Regulatory information

**SARA 311/312** : None

**SARA Title III Section 302 Extremely Hazardous Substances** : None

| | Ingredient name | CAS number | Concentration (%) |
|---|---|---|---|
| **SARA Title III Section 313 Toxic Chemicals** : | Sulfuric acid diammonium salt | | 95 - 100% |

**US EPA CERCLA Hazardous Subtances (40 CFR 302)** : None

**State regulations**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropraite agency in your state.

| Ingredient name | CAS number | State Code | Concentration (%) |
|---|---|---|---|
| Sulfuric acid diammonium salt | 7783-20-2 | MA - S, NJ - HS, PA - RTK HS | 95 - 100% |

## Section 15. Regulatory information

Massachusetts Substances: MA - S
Massachusetts Extraordinary Hazardous Substances: MA - Extra HS
New Jersey Hazardous Substances: NJ - HS
Pennsylvania RTK Hazardous Substances: PA - RTK HS
Pennsylvania Special Hazardous Substances: PA - Special HS

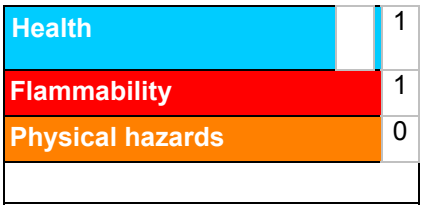
**California Prop. 65**

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

**U.S. Toxic Substances Control Act** : Listed on the TSCA Inventory.

## Section 16. Other information

**Hazardous Material Information System** :




**0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme**
***=Chronic**

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**National Fire Protection Association (U.S.A.)** :


**0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe**

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