



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name CERIC AMMONIUM SULFATE, DIHYDRATE, REAGENT (ACS)
Catalog # 16
Version # 02
Revision date 24-Jul-2009
CAS # 10378-47-9
CAS # 7637-03-8
Synonym(s) AMMONIUM CERIC SULFATE * AMMONIUM TETRASULFATOCERATE
Manufacturer information GFS Chemicals, Inc.
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2. Hazards Identification

Emergency overview Exposure to powder or dusts may be irritating to eyes, nose and throat.
OSHA regulatory status This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Eye contact.
Eyes Dust or powder may irritate eye tissue.
Skin May irritate skin and mucous membranes.
Inhalation Inhalation of dusts may cause respiratory irritation.
Ingestion Ingestion may cause irritation to mucous membranes.
Potential environmental effects Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Components	CAS #	Percent
CERIC AMMONIUM SULFATE	10378-47-9	90 - 100

4. First Aid Measures

First aid procedures
Eye contact Rinse with water. Get medical attention if irritation develops or persists.
Skin contact Rinse skin with water/shower. Get medical attention if irritation develops or persists.
Inhalation If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Ingestion Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately. Do not induce vomiting without medical advice.
General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties The product is not flammable. Not a fire hazard.
Extinguishing media
Suitable extinguishing media Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Use extinguishing agent suitable for type of surrounding fire.

Protection of firefighters

Protective equipment and precautions for firefighters In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out.

Specific methods In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Avoid inhalation of dust from the spilled material. Wear a dust mask if dust is generated above exposure limits.

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods for containment If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product.

Methods for cleaning up Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. Collect dust or particulates using a vacuum cleaner with a HEPA filter. Following product recovery, flush area with water.

7. Handling and Storage

Handling Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust from this material. Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Handle and open container with care.

Storage Store in a well-ventilated place. Keep container tightly closed. Guard against dust accumulation of this material. Use care in handling/storage.

8. Exposure Controls / Personal Protection

Engineering controls Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Personal protective equipment

Respiratory protection Wear respirator with dust filter.

Hand protection Not normally needed.

Eye / face protection Wear dust goggles.

Skin protection No special protective equipment required.

General hygiene considerations Do not breathe dust. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice.

General Not normally needed.

9. Physical & Chemical Properties

Appearance Crystals and powder.

Color Yellow to orange.

Odor Odorless.

Odor threshold Not available.

Physical state Solid.

Form Powder. Crystalline.

pH Not available.

Melting point Not available.

Freezing point Not available.

Boiling point Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability Not available.

Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Relative density	Not available.
Solubility (water)	hydrolyzes
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Molecular weight	632.5800 g/mol
Molecular formula	Ce(NH ₄) ₄ (SO ₄) ₄ ·2H ₂ O

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Incompatible materials	Avoid contact with organic matter or oxidizable materials.
Hazardous decomposition products	No hazardous decomposition products are known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological information	Not considered toxic hazard.
Local effects	Inhalation of dusts may cause respiratory irritation.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Further information	This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity	This product has no known eco-toxicological effects.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not applicable.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances - Not applicable.
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CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 2
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 0
Instability: 0

Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available. The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

Issue date 24-Jul-2009

This data sheet contains changes from the previous version in section(s): This document has undergone significant changes and should be reviewed in its entirety.