

# **Ceric Ammonium Sulfate**

### **SECTION 1. IDENTIFICATION**

Product Identifier	Ceric Ammonium Sulfate
Other Means of Identification	Ammonium cerium (IV) sulfate dihydrate, Ceric ammonium sulfate dihydrate
Product Code(s)	CE3820
Product Family	Inorganic Solid
Recommended Use	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
Supplier Identifier	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
Emergency Phone No.	CANUTEC CANADA, 613-996-6666, 24 Hours
SDS No.	1062

### **SECTION 2. HAZARD IDENTIFICATION**

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Skin irritation - Category 2; Eye irritation - Category 2; Specific target organ toxicity (single exposure) - Category 3 Label Elements



Signal Word: Warning

Hazard Statement(s): Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statement(s): Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves. Response:

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations. **Other Hazards** 

None known.

# **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Ceric Ammonium Sulfate	10378-47-9	94 - 100	Ammonium cerium (IV) sulfate dihydrate, Ceric ammonium sulfate dihydrate	

# **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

#### Inhalation

Remove source of exposure or move to fresh air. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

#### Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

#### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor. Specific treatment is required.

#### Ingestion

Do not induce vomiting. Immediately call a Poison Centre or doctor.

#### **First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

#### Most Important Symptoms and Effects, Acute and Delayed

#### None known.

#### Immediate Medical Attention and Special Treatment

**Special Instructions** 

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

# **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Extinguishing Media**

#### Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

#### **Unsuitable Extinguishing Media**

Do not use a solid (straight) water stream as it may scatter and spread fire.

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#### **Specific Hazards Arising from the Product**

Heating increases the release of toxic vapour. Closed containers may rupture violently when heated releasing contents.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide; corrosive sulfur oxides; corrosive, oxidizing nitrogen oxides.

#### Special Protective Equipment and Precautions for Fire-fighters

Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles. Dike and recover contaminated water for appropriate disposal.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

# **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

#### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

#### Methods and Materials for Containment and Cleaning Up

Avoid generating dust. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

# **SECTION 7. HANDLING AND STORAGE**

#### Precautions for Safe Handling

Wear personal protective equipment to avoid direct contact with this chemical. Only use where there is adequate ventilation. Avoid generating dusts. Prevent accidental contact with incompatible chemicals. Wash hands thoroughly after handling this material.

#### **Conditions for Safe Storage**

Store in an area that is: cool, dry, well-ventilated. Store in a closed container.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

Not available.

Consult local authorities for provincial or state exposure limits.

#### **Appropriate Engineering Controls**

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

#### **Individual Protection Measures**

#### **Eye/Face Protection**

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

#### **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.

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# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Basic Physical and Chemical</b>	Properties
Appearance	Yellow - orange crystals.
Odour	Not available
Odour Threshold	Not available
рН	Not available
Melting Point/Freezing Point	130 °C (266 °F) (melting); 130 °C (266 °F) (freezing)
Initial Boiling Point/Range	Not available
Flash Point	Not available
Evaporation Rate	Not available
Flammability (solid, gas)	Not available
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	Not available
Solubility	Soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Solid

# SECTION 10. STABILITY AND REACTIVITY

#### Reactivity

Not reactive under normal conditions of use.

**Chemical Stability** 

Normally stable.

### **Possibility of Hazardous Reactions**

Hazardous polymerization does not occur.

#### **Conditions to Avoid**

Incompatible materials.

#### **Incompatible Materials**

Strong oxidizing agents (e.g. perchloric acid), strong bases (e.g. sodium hydroxide), strong acids (e.g. hydrochloric acid).

### **Hazardous Decomposition Products**

Corrosive, oxidizing nitrogen oxides; corrosive sulfur oxides; corrosive, flammable ammonia.

# SECTION 11. TOXICOLOGICAL INFORMATION

#### Likely Routes of Exposure

Inhalation; skin contact; ingestion; eye contact.

#### **Acute Toxicity**

Chemical Name		LC50	LD50 (oral)	LD50 (derma	al)	
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Ceric Ammonium Sulfate	Not available	Not availab	le	Not available
Skin Corrosion/Irritation				
Causes skin irritation.				
Serious Eye Damage/Irritat	ion			
Causes eye irritation.				
STOT (Specific Target Orga	an Toxicity) - Single	e Exposure		
Inhalation				
May cause nose and thr	oat irritation.			
Ingestion				
May cause irritation of the	ne mouth, throat and	stomach.		
Aspiration Hazard				
No information was located.				
STOT (Specific Target Orga	an Toxicity) - Repea	ited Exposure		
No information was located.				
Respiratory and/or Skin Se	ensitization			
No information was located.				
Carcinogenicity				
Chemical Name	IARC	ACGIH®	NTP	OSHA
Ceric Ammonium Sulfate	Not Listed	Not designated	Not Listed	Not Listed
Reproductive Toxicity				· · · · · ·
Development of Offspr	ing			
No information was loca	ted.			

No information was located. Effects on or via Lactation

No information was located.

#### Germ Cell Mutagenicity

No information was located.

**Interactive Effects** 

No information was located.

# SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

# SECTION 13. DISPOSAL CONSIDERATIONS

#### **Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

# **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

### Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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# **SECTION 15. REGULATORY INFORMATION**

### Safety, Health and Environmental Regulations

### Canada

### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Not listed on the DSL.

### USA

### Toxic Substances Control Act (TSCA) Section 8(b)

Not listed on the TSCA Inventory.

# **SECTION 16. OTHER INFORMATION**

SDS Prepared By	Alphachem Limited
Phone No.	(905)-821-2995
Date of Preparation	August 03, 2017
Date of Last Revision	August 03, 2017
References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).
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