



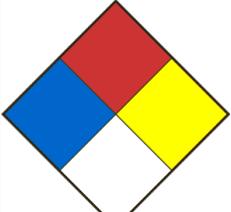
Centre Anti-Poison pour le Québec: (800) 463-5060
 Tél. (Qc): (418) 660-8666 / 800-890-8666
 Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier CERIC AMMONIUM NITRATE		Product Use Laboratory use	
Chemical formula (NH ₄) ₂ Ce(NO ₃) ₆		Product code AR-0165	Molar weight 548,23
Chemical name / Commercial name / Synonymous CERIC AMMONIUM NITRATE, AMMONIUM HEXANITRATOCERATE(IV), AMMONIUM CERIUM NITRATE, DIAMMONIUM CERIUM HEXANITRATE			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666	CENTRE ANTI-POISON DU QUÉBEC 800-463-5060	
Date SDS 11/25/2019	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	<p>Oxidizing solids category 2</p> <p>Corrosive to metals-Category 1</p> <p>Serious eye damage/eye irritation - Serious eye damage category 1</p> <p>Acute toxicity - Oral category 4</p> <p>Respiratory or skin sensitization - Skin sensitize category 1</p> <p>Skin corrosion/irritation - Skin irritation category 2</p>
Signal Word	<p>DANGER</p>
Hazards statements (H)	<p>H272 May intensify fire; oxidiser.</p> <p>H290 May be corrosive to metals.</p> <p>H302 Harmful if swallowed.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H315 Causes skin irritation.</p>
Precautionary statements (P)	<p>P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.</p> <p>P220 Keep/Store away from clothing and combustible materials.</p> <p>P234 Keep only in original container.</p> <p>P261 Avoid breathing dust / fume / gas / mist / vapours / spray.</p> <p>P264 Wash the areas of the body that have been in contact with the product after handling.</p> <p>P270 Do no eat, drink or smoke when using this product.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</p> <p>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER or doctor/physician.</p> <p>P321 Specific treatment (see section 4 of the SDS and on this label).</p> <p>P330 Rinse mouth.</p> <p>P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.</p> <p>P362 + P364 Take off contaminated clothing and wash it before reuse.</p> <p>P370 + P378 In case of fire: Use dry sand, a chemical powder, or an anti-alcoholic foam for extinction.</p> <p>P390 Absorb spillage to prevent material damage.</p> <p>P406 Store in a corrosion resistant container / or a container with corrosion resistant liner.</p> <p>P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.</p> <p>P332 + P313 If skin irritation occurs: Get medical advice/attention.</p>
PICTOGRAMS	
Other dangers	<p>NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)</p>
	<p>Health 2</p> <p>Fire 0</p> <p>Reactivity 2</p> <p>Special danger OX</p>

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Nitrate cérique d'ammonium dihydrate	16774-21-3	<=100

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. If irritation persists, seek medical attention.
Skin contact	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
Inhalation	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. Consult a physician.
Ingestion	Do NOT induce vomiting. If the person is conscious, rinse the mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	Show this safety data sheet to the doctor in attendance.

SECTION 05 - FIREFIGHTING MEASURES

Flammability	No
Ignition conditions	Non flammable.
Suitable extinguishing media	Dry chemical powder, dry sand, alcohol resistant foam.
Unsuitable extinguishing media	Data not available.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. Nitrogen oxides (NO _x). Cerium oxides. Ammonia.
Special fire and explosion hazards	May react violently with incompatible products (Ref Section 10). Strong oxidizer, contact with combustible material can cause fire or explosion if heated or crushed in presence of organic products.
Special protective equipment and precautions for firefighters	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

SECTION 06 - ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up / Personnel precautions, protective equipment	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains. Discharge into the environment must be avoided.
--	--

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Hygroscopic.
Methods of handling	Avoid contact with the skin, eyes and clothes. Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace control parameters

Components	CAS-No.	Control	Value	Basis
AMMONIUM CERIUM NITRATE DIHYDRATE	16774-21-3	TLV, TWA, STEL	No data available	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TLV, TWA, STEL	No data available	Canada. British Columbia OEL
		TLV, TWA, STEL	No data available	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Ventilation	Use fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Engineering control	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Poudre cristalline orange.
Odour	Légèrement âcre.
Odour threshold	Data not available
pH	1 à 20°C (50g/L solution aqueuse).
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Vapour density	Data not available
Relative density	2.49g/cm ³
Solubility	Soluble dans l'eau.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	214°C
Viscosity	Data not available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Oxidizer: Fire hazard in case of contact with combustible / organic substance.
Possibility of hazardous reactions	Oxidizer.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid excessive heat.
Incompatible material	Reducing agents, Organic materials, Metallic powders. Acids. Bases. Cyanides.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx). Cerium oxides. Ammonia.

SECTION 11 - TOXICOLOGICAL INFORMATION

CERIC AMMONIUM NITRATE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Irritation.
- Skin	Irritation.
- Inhalation	Acute inhalation toxicity. Irritation of the mucous membranes and the upper respiratory system.
Acute toxicity (Ingestion)	Acute oral toxicity Burns in the mouth, pharynx, the digestive tract and the gastrointestinal tract.
Chronic exposure effects / symptoms	Burning sensation, cough, asthmatic form, laryngitis, Respiratory insufficiency, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pulmonary congestion, pulmonary edema, The product is extremely destructive of tissues of the mucous membranes, upper respiratory tract, eyes and skin. The use of a gastric wash or emesis is contraindicated. Possible perforation of the stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to delicate tissues and the danger of perforation.
DL50 (specify species and route of entry)	LD50 Oral - Rat - > 300-2000 mg/kg LD50 Dermal - Rat - > 2000 mg/kg
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	LC50 - Oncorhynchus mykiss (rainbow trout) - Semi-Static - 0.53 mg/L - 96 h EC50 - Daphnia magna (Water flea) - Semi-Static - 100 mg/L - 48 h CE50- activated sludge > 1000 mg/L - 3 h - static test. CE50r - Pseudokirchneriella subcapitata (algues vertes) - static test - 93 mg/L - 72 h
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Bioaccumulative potential	Data not available.
Mobility in soil	Data not available.
Other adverse effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
Contaminated Packaging	Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

UN Number	3085
UN Proper shipping name	SOLIDE COMBURANT, CORROSIF, N.S.A. (nitrate cérique d'ammonium)
Transport hazard class(es)	5.1 Oxidizing substances 8 Corrosive substances
Packing group	II
Limited quantity index	1kg
ERAP Index	1000
Special precautions	16

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Oxidizing solids category 2 Corrosive to metals-Category 1 Serious eye damage/eye irritation - Serious eye damage category 1 Acute toxicity - Oral category 4 Respiratory or skin sensitization - Skin sensitize category 1 Skin corrosion/irritation - Skin irritation category 2
--------------	---

SECTION 16 - OTHER INFORMATION

Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 11/25/2019