

MATERIAL SAFETY DATA SHEET**Product Name:** Ammonium cerric nitrate**CAS No.:** 16774-21-3**Version:** 0**1. Identification**

Product Code : 90113, 90322
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2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
AMMONIUM CERRIC NITRATE	16774-21-3	90-100%

3. Hazards Identification

Emergency Overview : DANGER! STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

Health Rating : 2 - Moderate
Flammability Rating : 0 - None
Reactivity Rating : 3 - Severe (Oxidizer).
Contact Rating : 2 - Moderate.

Potential Health Effects

Inhalation : Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Ingestion : Large doses of nitrates may cause dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, convulsions, and collapse

Skin Contact : Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact : Causes irritation, redness, and pain.

Chronic Exposure : Under some circumstances methemoglobinemia occurs in individuals when the nitrate is converted by bacteria in the stomach to nitrite. Nausea, vomiting, dizziness, rapid heartbeat, irregular breathing, convulsions, coma, and death can occur should this conversion take place.

Aggravation of Pre-existing Conditions : No information found.

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- General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
- Inhalation** : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion** : Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.
- Skin Contact** : Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire fighting measures

- Fire** : Not combustible, but substance is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. This oxidizing material can increase the flammability of adjacent combustible materials.
- Explosion** : Contact with oxidizable substances may cause extremely violent combustion. Sensitive to mechanical impact.
- Fire Extinguishing Media:** : Water spray.
- Special Information** : Wear full protective clothing and breathing equipment for high-intensity fire or potential explosion conditions.

6. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures** : Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Methods and material for containment and cleaning up** : Sweep up and place in a clearly labeled container for chemical waste.
Clean surface thoroughly to remove residual contamination.
- Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

MATERIAL SAFETY DATA SHEET**Product Name:** Ammonium cerric nitrate**CAS No.:** 16774-21-3**Version:** 0**7. Handling and Storage**

- Precautions for safe handling** : Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place.

8. Exposure Controls Personal Protection

- Control parameters**
- Occupational exposure limits** : None established
- Ventilation System** : A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.
- Personal Respirators (NIOSH Approved):** : For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.
WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres
- Skin Protection** : Wear protective gloves and clean body-covering clothing.
- Eye Protection:** : Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.
- Other** : Wear suitable protective clothing.
- Respiratory protection** : In case of inadequate ventilation use suitable respirator.
- Hygiene measures** : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

9. Physical and Chemical Properties

- Appearance** : Small, orange-red, monoclinic crystals.
- Odor** : Slight characteristic odor.

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pH	:	No information found.
Melting point/freezing point	:	No information found.
Initial boiling point and boiling range	:	No information found.
Flash Point	:	No information found.
Vapor pressure	:	No information found.
Vapor density	:	No information found.
Relative density	:	No information found.
Solubility in water	:	141g/100ml water @ 25C (77F).
Solubility (other)	:	No data available.
Formula	:	(NH ₄) ₂ Ce(NO ₃) ₆
Molecular Weight	:	548.23 g/mol

10. Stability and Reactivity

Reactivity	:	No dangerous reaction known under conditions of normal use .
Chemical stability	:	Stable under ordinary conditions of use and storage.
Hazardous Polymerization:	:	Will not occur.
Conditions to avoid	:	Heat, shock, friction, incompatibles.
Incompatible materials	:	Flammable and organic materials, reducing agents, powdered aluminum, boron phosphate, cyanides, esters, phosphor, phosphorus, sodium cyanide, sodium hypophosphite, stannous chloride, and thiocyanates.
Hazardous decomposition products	:	Oxides of nitrogen.

11. Toxicological Information**Information on likely routes of exposure**

Ingestion	:	May cause irritation of the gastrointestinal tract.
Inhalation	:	May cause irritation to the respiratory system.
Skin contact	:	May cause irritation.
Eye contact	:	May cause temporary eye irritation.

Information on toxicological effects**Acute toxicity (list all possible routes of exposure)**

Oral Product	:	No data recorded.
Dermal Product	:	No data available.
Inhalation Product	:	No data available.
Repeated dose toxicity Product	:	No data available.
Skin corrosion/irritation Product	:	May cause skin irritation.
Serious eye damage/eye irritation Product	:	May irritate eyes.

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- Respiratory or skin sensitization Product** : Not a skin sensitizer.
- Carcinogenicity Product** : This substance has no evidence of carcinogenic properties.
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE** : No carcinogenic components identified.
- US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE** : No carcinogenic components identified.
- US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050** : No carcinogenic components identified.
- Investigated as a tumorigen and mutagen.
- Reproductive toxicity Product** : No components toxic to reproduction.
- Specific target organ toxicity - single exposure Product** : No data available.
- Specific target organ toxicity - repeated exposure Product** : No data available.
- Aspiration hazard Product** : Not classified.
- Other effects** : None known.

12. Ecological Information

- Environmental Fate** : No information found.
- Environmental Toxicity** : No information found

13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	1477	CERRIC AMMONIUM NITRATE	5.1	II	No
IMDG	1477	CERRIC AMMONIUM NITRATE	5.1	II	No

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IATA	1477	CERRIC AMMONIUM NITRATE	5.1	II	No
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15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

16. Other Information**Issue Date :**01/08/2014**Version : 0**

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