

# Safety Data Sheet

## Ammonium Oxalate, Monohydrate

**CAROLINA**<sup>®</sup>  
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### Section 1 Product Description

**Product Name:** Ammonium Oxalate, Monohydrate  
**Recommended Use:** Science education applications  
**Synonyms:** Ethanedioic Acid, Diammonium Salt, Monohydrate  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)  
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER**



Harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage.

**GHS Classification:**

Skin Corrosion/Irritation Category 1C, Serious Eye Damage/Eye Irritation Category 1, Acute Toxicity - Dermal Category 4, Acute Toxicity - Oral Category 4

### Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Ammonium Oxalate, Monohydrate	6009-70-7	100

### Section 4 First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**Skin Contact:** IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
**Ingestion:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

### Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.  
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.  
**Fire and/or Explosion Hazards:** Fire or excessive heat may produce hazardous decomposition products.  
**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide, Nitrogen containing gases

### Section 6 Spill or Leak Procedures

# Safety Data Sheet

## Steps to Take in Case Material Is Released or Spilled:

Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.  
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## Section 7 Handling and Storage

**Handling:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.  
**Storage:** Store locked up. Keep container tightly closed in a cool, well-ventilated place.  
**Storage Code:** Green - general chemical storage

## Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Ammonium Oxalate, Monohydrate	N/A	N/A	N/A	N/A

### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.  
**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.  
**Respiratory Protection:** No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 11. A respirator is not normally required.  
**Respirator Type(s):** None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.  
**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.  
**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.  
**Gloves:** Neoprene, Polyvinyl chloride

## Section 9 Physical Data

<b>Formula:</b> NH <sub>4</sub> C <sub>2</sub> O <sub>4</sub> NH <sub>4</sub> * H <sub>2</sub> O	<b>Vapor Pressure:</b> No data available
<b>Molecular Weight:</b> 142.11	<b>Evaporation Rate (BuAc=1):</b> No data available
<b>Appearance:</b> White Solid	<b>Vapor Density (Air=1):</b> No data available
<b>Odor:</b> None	<b>Specific Gravity:</b> 1.50
<b>Odor Threshold:</b> No data available	<b>Solubility in Water:</b> Soluble
<b>pH:</b> 6.4 (0.1M solution)	<b>Log Pow (calculated):</b> -2.3 (calculated)
<b>Melting Point:</b> No data available	<b>Autoignition Temperature:</b> No data available
<b>Boiling Point:</b> No data available	<b>Decomposition Temperature:</b> 70 C
<b>Flash Point:</b> No data available	<b>Viscosity:</b> No data available
<b>Flammable Limits in Air:</b> No data available	<b>Percent Volatile by Volume:</b> No data available

## Section 10 Reactivity Data

**Reactivity:** Not generally reactive under normal conditions.  
**Chemical Stability:** Stable under normal conditions.  
**Conditions to Avoid:** None known.  
**Incompatible Materials:** Strong acids  
**Hazardous Decomposition Products:** Nitrogen containing gases, Carbon dioxide, Carbon monoxide  
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

# Safety Data Sheet

**Routes of Entry:** Inhalation, ingestion, eye or skin contact.  
**Symptoms (Acute):** Vomiting, Cardiovascular system, Musculoskeletal system, Convulsions, Headache  
**Delayed Effects:** No data available

<b>Acute Toxicity:</b>				
<b>Chemical Name</b>	<b>CAS Number</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Ammonium Oxalate, Monohydrate	6009-70-7	Not determined	Not determined	Not determined

<b>Carcinogenicity:</b>				
<b>Chemical Name</b>	<b>CAS Number</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA</b>
Ammonium Oxalate, Monohydrate	6009-70-7	Not listed	Not listed	Not listed

**Chronic Effects:**

**Mutagenicity:** No evidence of a mutagenic effect.  
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).  
**Sensitization:** No evidence of a sensitization effect.  
**Reproductive:** No evidence of negative reproductive effects.  
**Target Organ Effects:**

<b>Acute:</b>	Cardiovascular system, Musculoskeletal system, Mucous Membranes, Blood
<b>Chronic:</b>	No data available

## Section 12 Ecological Data

**Overview:** Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.  
**Mobility:** This material is expected to have high mobility in soil. It absorbs weakly to most soil types.  
**Persistence:** No data  
**Bioaccumulation:** Bioconcentration is not expected to occur.  
**Degradability:** No data  
**Other Adverse Effects:** No data

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Eco Toxicity</b>
N/A	6009-70-7	

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

<b>Ground - DOT Proper Shipping Name:</b> UN1759 Corrosive Solid n.o.s. (Ammonium Oxalate) Class 8 P.G. III	<b>Air - IATA Proper Shipping Name:</b> UN1759 Corrosive Solid n.o.s. (Ammonium Oxalate) Class 8 P.G. III
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## Section 15 Regulatory Information

**TSCA Status:** A component (or components) of this product is not listed on the TSCA Inventory of Existing Chemical Substances. Product is for research and development use only.

<b>Chemical Name</b>	<b>CAS Number</b>	<b>§ 313 Name</b>	<b>§ 304 RQ</b>	<b>CERCLA RQ</b>	<b>§ 302 TPQ</b>	<b>CAA 112(2) TQ</b>
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# Safety Data Sheet

Ammonium Oxalate, Monohydrate 6009-70-7 No No 5000 lb final RQ (listed under Ammonium oxalate); 2270 kg final RQ (listed under Ammonium oxalate) No No

## Section 16

## Additional Information

Revised: 09/09/2015

Replaces: 09/03/2014

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

### Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health