

# Safety Data Sheet

Issue Date: 28-Aug-2023

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Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** Nitro-Mag S

### Other means of identification

**SDS #** GT-021

### Recommended use of the chemical and restrictions on use

**Recommended Use** Fertilizer.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Growth Technologies, LLC.  
6284 W Old Potash Highway  
Grand Island, NE 68803  
Ph: 308-224-7190

### Emergency telephone number

**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Physical state** Liquid

### Classification

Serious eye damage/eye irritation	Category 2
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### Signal Word

Warning

### Hazard statements

Causes serious eye irritation



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

### Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
UAN Solution	15978-77-5	30-40
Magnesium Chloride	7786-30-3	3-7
Ammonium Sulfate	7783-20-2	1-5

UREA

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.

#### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Causes serious eye irritation.
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#### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

#### Specific Hazards Arising from the Chemical

Not determined.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

<b>Personal Precautions</b>	Use personal protective equipment as required.
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**Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection** Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection** Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Not determined
<b>Appearance</b>	Not determined	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Not determined		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	No data available	
<b>Melting point / freezing point</b>	No data available	
<b>Initial boiling point and boiling range</b>	No data available	

<b>Flash point</b>	No data available
<b>Evaporation Rate</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Not determined
<b>Flammability Limit in Air</b>	
<b>Upper flammability or explosive limits</b>	No data available
<b>Lower flammability or explosive limits</b>	No data available
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	No data available
<b>Relative Density</b>	Not determined
<b>Water Solubility</b>	Not determined
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Autoignition temperature</b>	No data available
<b>Hyphen</b>	Not determined
<b>Kinematic viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible materials

None known based on information supplied.

### Hazardous decomposition products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	Do not ingest.

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Urea 57-13-6	= 8471 mg/kg ( Rat )	-	-
Ammonium Thiosulfate 7783-18-8	= 1950 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-
Magnesium Chloride 7786-30-3	= 2800 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Ammonium Sulfate 7783-20-2	= 2840 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Urea, reaction products with formaldehyde 68611-64-3	14300 - 15000 mg/kg ( Rat )	-	-
Imidodicarbonic diamide 108-19-0	14300 - 15000 mg/kg ( Rat )	-	-

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

**Oral LD50** 6,393.30 mg/kg  
**Dermal LD50** 4,920.20 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Component Information**

Chemical name	Algae/aquatic plants	Fish	Crustacea
Urea 57-13-6		LC50: 16200 - 18300mg/L (96h, <i>Poecilia reticulata</i> )	EC50: =3910mg/L (48h, <i>Daphnia magna</i> )
Magnesium Chloride 7786-30-3	EC50: >82.7mg/L (72h, <i>Pseudokirchneriella subcapitata</i> )	LC50: 1970 - 3880mg/L (96h, <i>Pimephales promelas</i> )	EC50: =140mg/L (48h, <i>Daphnia magna</i> )
Ammonium Sulfate 7783-20-2  UAN 32%		LC50: =250mg/L (96h, <i>Brachydanio rerio</i> ) LC50: =480mg/L (96h, <i>Brachydanio rerio</i> ) LC50: =420mg/L (96h, <i>Brachydanio rerio</i> ) LC50: =18mg/L (96h, <i>Cyprinus carpio</i> ) LC50: 32.2 - 41.9mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 5.2 - 8.2mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: >100mg/L (96h, <i>Pimephales promelas</i> )	LC50: =14mg/L (48h, <i>Daphnia magna</i> )

		LC50: 123 - 128mg/L (96h, Poecilia reticulata) LC50: =126mg/L (96h, Poecilia reticulata)	
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**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Chemical name	Partition coefficient
Ammonium Sulfate 7783-20-2	-5.1

**Other adverse effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

### 14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AIIC
Urea	X	ACTIVE	X	X	X	X	X	X	X
Ammonium Thiosulfate	X	ACTIVE	X	X	X	X	X	X	X
Magnesium Chloride	X	ACTIVE	X	X	X	X	X	X	X
Ammonium Sulfate	X	ACTIVE	X	X	X	X	X	X	X
Ammonium Sulfite	X	ACTIVE	X	X	X	X	X	X	X
Urea, reaction products with formaldehyde	X	ACTIVE	X	X	X		X		X
Imidodicarbonic diamide	X	ACTIVE	X	X		X	X		X

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

## US Federal Regulations

### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium Sulfite 10196-04-0	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ammonium Thiosulfate - 7783-18-8	7783-18-8	5-10	1.0
Ammonium Sulfate - 7783-20-2	7783-20-2	1-5	1.0
Ammonium Sulfite - 10196-04-0	10196-04-0	<1	1.0

### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

## US State Regulations

### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

This product contains the following substance(s) regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ammonium Sulfate 7783-20-2		X	X
Ammonium Sulfite 10196-04-0	X	X	X

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special hazards</b>
	-	-	-	-
<b><u>HMIS</u></b>	<b>Health hazards</b>	<b>Flammability</b>	<b>Physical hazards</b>	<b>Personal Protection</b>
	-	-	-	Not determined

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**Revision Note:** New format

**Disclaimer**

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.

**End of Safety Data Sheet**