



## MATERIAL SAFETY DATA SHEET

Name of Product:

**NACHURS MicroBolt Mg™**

Product #: F000104

Revision Date: Aug 3, 2012

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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PRODUCT NAME: NACHURS MicroBolt Mg™  
SYNONYMS: Magnesium 2.5% EDTA; Liquid micronutrient solution  
PRODUCT CODES: F000071, F000104

MANUFACTURER: NACHURS ALPINE SOLUTIONS®  
DIVISION: Marion  
ADDRESS: 421 Leader Street, Marion, OH 43302, United States

EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)

CHEMICAL NAME: Magnesium EDTA chelate  
CHEMICAL FAMILY: Chelated Micronutrient Solution- Mg  
CHEMICAL FORMULA:

PRODUCT USE:

PREPARED BY: NACHURS ALPINE SOLUTIONS®

SECTION 1 NOTES:

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### SECTION 2: HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW:

ROUTES OF ENTRY: Inhalation, Ingestion, Injection, Absorption

POTENTIAL HEALTH EFFECTS

EYES: May cause irritation  
SKIN: May cause irritation  
INGESTION: May cause irritation  
INHALATION: May cause irritation

ACUTE HEALTH HAZARDS: N/A

CHRONIC HEALTH HAZARDS: N/A

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

None known. Preexisting skin or respiratory disorders may be aggravated by excessive exposure to this material.

CARCINOGENICITY:

OSHA: N/A  
ACGIH: N/A  
NTP: N/A  
IARC: N/A  
OTHER: N/A

SECTION 2 NOTES:

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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INGREDIENT:	CAS. Reg No.	Approx %	TLV
Magnesium oxide	(CAS: 1309-48-4)	3.5%	none established
Nitriloriacetic Acid	(CAS: 139-333-3)	less than 0.1%	none established
Ethylendiaminetetraacetate	(CAS: 139-33-3)	22.5%	none established
Ammonium Hydroxide	(CAS: 1336-21-6)	10%	none established

CAS NO.:

% WT:

% VOL:

SARA 313 REPORTABLE: N/A

pmm:

mg/m3:

OSHA PEL-TWA: N/A

OSHA PEL STEL: N/A

OSHA PEL CEILING: N/A

ACGIH TLV-TWA: N/A

ACGIH TLV STEL: N/A

ACGIH TLV CEILING: N/A

SECTION 3 NOTES:

## SECTION 4: FIRST AID MEASURES

EYES: Flush with water immediately and thoroughly for 15 minutes. Seek medical attention.

SKIN: Wash with plenty of soap and water. Remove contaminated clothing and wash before reuse. If irritation persists seek medical attention.

INGESTION: Harmful if swallowed. Seek medical attention immediately. Call an emergency room, physician, or poison control. If significant amounts have been swallowed, give large amounts of water or milk to drink for dilution effect.

INHALATION: Under normal circumstances, is not an inhalation hazard. If misted and inhaled, seek medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES:

## SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR: UPPER: N/A  
(% BY VOLUME) LOWER: N/A

FLASH POINT:

F°: N/A

C°: N/A

METHOD USED: N/A

AUTOIGNITION TEMPERATURE:

F°: N/A

C°: N/A

NFPA HAZARD CLASSIFICATION:

HEALTH: 1  
FLAMMABILITY: 0  
REACTIVITY: 0  
OTHER: 0

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## HMIS HAZARD CLASSIFICATION

HEALTH: 1  
FLAMMABILITY: 0  
REACTIVITY: 0  
PROTECTION:

EXTINGUISHING MEDIA: Water or media suitable for surrounding fire. Dry chemical, Foam, CO<sub>2</sub>, Spray or Fog.

SPECIAL FIRE FIGHTING PROCEDURES: Suitable respiratory protection or SCBA and full protective clothing. Smoke and fumes from fire may contain hazardous components.

UNUSUAL FIRE AND EXPLOSION HAZARDS: If water is used to fight fire or cool containers, contain run-off by diking to prevent contamination of water supplies.

HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen Oxides may be released if dried product is burned.

SECTION 5 NOTES:

## SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Contain spill; absorb liquids by covering with clay or other absorbent material; then vacuum or scoop and sweep up waste and place in container for disposal.

SECTION 6 NOTES:

## SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry place out of direct sunlight, away from children and other food and feed products. Do not contaminate other stored products or the storage area by handling or storage of this product. Immediately clean up any spills which occur during handling and storage. PROTECT FROM FREEZING. Do not store in aluminum or copper containing metal containers.

OTHER PRECAUTIONS: N/A

SECTION 7 NOTES:

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: N/A

VENTILATION: Provide adequate ventilation for local areas.

RESPIRATORY PROTECTION: Not normally required. If vapors may exceed acceptable levels, wear MSHA/NIOSH approved respirator.

EYE PROTECTION: Chemical splash goggles and full-face shield.

SKIN PROTECTION: Rubber gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear clothing consistent with good practices for handling and applying fertilizers. Wash clothing before reuse.

WORK HYGIENIC PRACTICES: N/A

EXPOSURE GUIDELINES: N/A

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## SECTION 8 NOTES:

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE: Clear

ODOR: Slight ammonia

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 8.0-9.0

pH (Other):

BOILING POINT:

F°: 220

C°: 106

MELTING POINT:

F°: N/A

C°: N/A

FREEZING POINT:

F°: N/A

C°: N/A

VAPOR PRESSURE (mmHg) @

F°: N/A

C°: N/A

VAPOR DENSITY (AIR = 1) @

F°: N/A

C°: N/A

SPECIFIC GRAVITY (H<sub>2</sub>O = 1) 1.15

DENSITY, LBS/GAL: 9.58

EVAPORATION RATE: N/A

SALT-OUT TEMPERATURE: °F

SOLUBILITY IN WATER: Complete

PERCENT SOLIDS BY WEIGHT:

PERCENT VOLATILE:

BY WT

BY VOL @F°: N/A

C°: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): None

WITH WATER LBS/GAL:

WITHOUT WATER LBS/GAL:

MOLECULAR WEIGHT: N/A

VISCOSITY: N/A

SECTION 9 NOTES:

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### SECTION 10: STABILITY AND REACTIVITY

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	STABLE	UNSTABLE
STABILITY:	x	
CONDITIONS TO AVOID (STABILITY):	None known	
INCOMPATIBILITY (MATERIAL TO AVOID):	Strong Oxidizers, Acids. Avoid contact with aluminum, copper-containing metals.	
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Nitrogen oxides may be released if dried product is burned.	
HAZARDOUS POLYMERIZATION:	Will not occur.	
CONDITIONS TO AVOID (POLYMERIZATION):	N/A	

SECTION 10 NOTES:

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## SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: N/A

SECTION 11 NOTES:

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## SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: Do not allow entry into drinking water.

SECTION 12 NOTES:

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## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD: Material which cannot be used at the site should be disposed of in an approved waste disposal facility, following all applicable Federal, State and local regulations. As product should a Ph of less than 12.5 and would not be considered hazardous waste according to EPA regulation 40CFR261. Triple rinse empty containers and offer for recycling or reconditioning, or puncture and dispose of in an approved sanitary landfill, or by other approved procedures by state and local authorities. Do not contaminate water supplies by disposal of wastes or containers.

RCRA HAZARD CLASS: N/A

SECTION 13 NOTES:

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## SECTION 14: TRANSPORT INFORMATION

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U.S. DEPARTMENT OF TRANSPORTATION:

PROPER SHIPPING NAME: NACHURS MicroBolt Mg™

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENT: N/A

Health: 1

Flammability: 0

Reactivity: 0

Specific: None

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WATER TRANSPORTATION:

PROPER SHIPPING NAME: NACHURS MicroBolt Mg™

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENT:

Health: 1          Flammability: 0          Reactivity: 0          Specific: None

AIR TRANSPORTATION

PROPER SHIPPING NAME: NACHURS MicroBolt Mg™

HAZARD CLASS: N/A

ID NUMBER: N/A

PACKING GROUP: N/A

LABEL STATEMENTS:

Health: 1          Flammability: 0          Reactivity: 0          Specific: None

OTHER AGENCIES:

SECTION 14 NOTES:

**SECTION 15: REGULATORY INFORMATION**

U.S. FEDERAL REGULATIONS:

TSCA (TOXIC SUBSTANCE CONTROL ACT):          Yes

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):          No

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):          N/A

311/312 HAZARD CATEGORIES:          Immediate **Y**          Fire **N**          Sudden Release of Pressure          **N**  
Delayed **N**          Reactive **N**

313 REPORTABLE INGREDIENTS:          None

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

**SECTION 16: OTHER INFORMATION**

OTHER INFORMATION:

PREPARATION INFORMATION:    Technical Services

DISCLAIMER: The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and NACHURS ALPINE SOLUTIONS® will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years.

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