

Material Safety Data Sheet

Effective Date: 23-JAN-1996
Product: BIO-FOL

I. IDENTIFICATION

Chemical Name: NOT APPLICABLE, FORMULATED MIXTURE.
Chemical Family: FERTILIZER
Formula: NOT APPLICABLE, FORMULATED MIXTURE.
Synonyms: NONE
CAS Number: SEE INGREDIENT STATEMENT, SECTION III.
EPA Number: NONE REQUIRED

II. PHYSICAL DATA

Boiling Point: >100 DEGREES C.
Freezing Point: <20 DEGREES F.
Spec Gravity: 1.080 GMS/CC
Vapor Pressure: NOT DETERMINED
Vapor Density: NOT DETERMINED
Solubility: 99%
Volatiles: 0.50%
Evaporation: NOT DETERMINED
Melting Point: NOT APPLICABLE
Appearance: CLOUDY, BROWN LIQUID, AMINE ODOR

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
SODIUM METASILICATE	06834-92-0	0.50	15 MG/M3	SKIN & EYE IRRITANT
MAGNESIUM SULFATE		5.00	15 MG/M3	SKIN & EYE IRRITANT
PHOSPHORIC ACID (85)	07664-38-2	2.00	1 MG/M3	CORROSIVE
PROPRIETARY BLEND OF PLANT NUTRIENTS AND HUMIC ACIDS		92.50	NOT ESTABLISHED	NONHAZARDOUS

IV. FIRE AND EXPLOSION HAZARD

Flash Point: NON-COMBUSTIBLE
Autoignition Temp: NOT APPLICABLE
Flammable Limit: NOT APPLICABLE
Extinguishing Media: NON-COMBUSTIBLE LIQUID. USE EXTINGUISHING MEDIA
FOR UNDERLYING CAUSE OF FIRE.
Special Fire Fight Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND
FULL PROTECTIVE EQUIPMENT. USE WATER SPRAY TO
KEEP FIRE-EXPOSED CONTAINERS COOL.

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Fire and Expl Hazard: PRODUCT MAY PRODUCE TOXIC FUMES UNDER FIRE
CONDITIONS.

V. HEALTH HAZARD

Carcinogen Information: NONE CURRENTLY KNOWN.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: INGESTION RESULTS IN VOMITING AND ABDOMINAL
CRAMPS. ACUTE ORAL LD50 (RAT) = >500 MG/KG.
Skin Absorption: ACUTE DERMAL LD50 (RAT) = >1000 MG/KG.
Inhalation: NOSE AND THROAT IRRITATION. ACUTE INHALATION
LC50 (RAT) = >10 MG/L.
Skin contact: DIRECT OR PROLONGED CONTACT MAY CAUSE SKIN
IRRITATION.
Eye Contact: DIRECT CONTACT WILL CAUSE SEVERE EYE
IRRITATION.
Chronic Effects: NONE CURRENTLY KNOWN.
Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: IF CONSCIOUS, GIVE MILK OR WATER TO DRINK,
INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IF
IRRITATION DEVELOPS.
Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER.
OBTAIN MEDICAL ATTENTION IF IRRITATION
DEVELOPS.
Inhalation: MOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IF
IRRITATION DEVELOPS.
Eyes: FLUSH EYES WITH WATER FOR 15 MINUTES, HOLDING
EYELIDS OPEN. OBTAIN MEDICAL ATTENTION IF
IRRITATION DEVELOPS.
Notes to Physician: IN THE EVENT OF AN ADVERSE RESPONSE, TREATMENT
SHOULD BE DIRECTED TOWARD CONTROL OF THE
SYMPTOMS. INGESTION MAY RESULT IN CORROSIVE
DAMAGE TO THE DIGESTIVE TRACT.

VI. REACTIVITY

Stability: Stable
Conditions to Avoid: NONE CURRENTLY KNOWN.
Polymerization: Will Not Occur
Conditions to Avoid: NONE CURRENTLY KNOWN.
Incompatibility material: PRODUCT MAY REACT VIGOROUSLY WITH ALKALINE
MATERIALS.

Helena Chemical Company
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Hazardous Combustion: SULPHUR DIOXIDE UNDER FIRE CONDITIONS.

VI. SPILL OR LEAK PROCEDURES

Spill or Leak Proc: CONTAIN PRODUCT, REUSE MATERIAL IF
UNCONTAMINATED. IF CONTAMINATED, ABSORB
MATERIAL WITH AN ABSORBENT SUCH AS CLAY OR SAND
AND PLACE IN SUITABLE CONTAINER FOR PROPER
DISPOSAL. DO NOT CONTAMINATE WATER SUPPLIES.
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO
FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE
RESOURCE CONSERVATION AND RECOVERY ACT.

VIII. SPECIAL PROTECTION INFORMATION

Respiration: NONE NEEDED UNDER NORMAL CONDITIONS.
Ventilation: LOCAL EXHAUST SUFFICIENT.
Gloves: IMPERVIOUS
Eyes: SPLASH PROOF GOGGLES.
Other: EYE WASH STATION, IMPERVIOUS APRON AND
FOOTWEAR.

IX. SPECIAL PRECAUTIONS

Special precaution: KEEP OUT OF REACH OF CHILDREN. DO NOT STORE
WITH FOOD, FEED, OR OTHER MATERIAL TO BE USED
OR CONSUMED BY HUMANS OR ANIMALS. DO NOT
CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR
PONDS.
Other precaution: A) RCRA HAZARDOUS WASTE NUMBER: NOT LISTED
B) SARA TITLE III, SECTION 313: PHOSPHORIC ACID
(2%)
C) SARA THRESHOLD PLANNING QUANTITY: NOT LISTED
D) CERCLA REPORTABLE QUANTITY: 27,000 GALLON
E) 49 CFR 172.101, APPENDIX A: HAZARDOUS
SUBSTANCES
F) 49 CFR 172.101, APPENDIX B: NOT LISTED

X. SHIPPING INFORMATION

Shipping name: NOT REGULATED BY DOT, IATA OR IMDG.
Hazard Class: NONE
Identification No: NONE
Labels Required: NONE REQUIRED
Placarding: NONE REQUIRED

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Freight Class: COMPOUND, FERTILIZER (MANUFACTURED FERTILIZER)
LIQUID, NOIBN

Chemical Name	Equivalent R.Q.
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PHOSPHORIC ACID	5000LB(2270 KG)

XI. GENERAL PRODUCT INFORMATION

National Fire Protection Association Rating:
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 1 Fire: 0 Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y	Delayed (Chronic) Health: N
Sudden Release of pressure: N	Fire: N
Reactive: N	

Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017
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