

Material Safety Data Sheet

Effective Date: 19-APR-2000  
Product: PRO-MATE TURF NECTAR

I. IDENTIFICATION

Chemical Name: UREA NITROGEN AND INORGANIC METAL SALTS  
Chemical Family: INORGANIC LIQUID FERTILIZER  
Formula: NOT APPLICABLE, FORMULATED MIXTURE.  
Synonyms: NONE  
CAS Number: NOT APPLICABLE FORMULATED MIXTURE  
EPA Number: NONE REQUIRED

II. PHYSICAL DATA

Boiling Point: >212 DEGREES F.  
Freezing Point: <32 DEGREES F.  
Spec Gravity: 1.287 GMS/CC  
Vapor Pressure: NOT DETERMINED  
Vapor Density: NOT DETERMINED  
Solubility: 99%  
Volatiles: <0.1  
Evaporation: NON-VOLATILE  
Melting Point: NOT APPLICABLE  
Appearance: LIGHT YELLOW LIQUID, SULFUROUS ODOR.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
PROPRIETARY BLEND OF UREA NITROGEN, SULFATE OF POTASH, FERROUS SULFATE HEPTAHYDRATE, MANGANESE SULFATE, ZINC SULFATE, CHELATING AGENT AND CITRIC ACID		100.00	1 MG/M3	SKIN & EYE IRRITANT

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: USE POSITIVE PRESSURE SELF-CONTAINED BREATHING  
APPARATUS WITH FULL PROTECTIVE CLOTHING. USE  
WATER SPRAY TO KEEP FIRE EXPOSED CONTAINERS  
COOL.  
Fire and Expl Hazard: DECOMPOSES ON HEATING TO NITROGEN OXIDES.

Material Safety Data Sheet

Effective Date: 19-APR-2000  
Product: PRO-MATE TURF NECTAR

V. HEALTH HAZARD

Carcinogen Information: NONE CURRENTLY KNOWN.

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: INGESTION RESULTS IN VOMITING AND ABDOMINAL CRAMPS.  
Skin Absorption: NONE CURRENTLY KNOWN.  
Inhalation: MAY CAUSE MINOR IRRITATION TO THE MUSCIOUS MEMBRANES.  
Skin contact: CONTACT MAY CAUSE MINOR IRRITATION.  
Eye Contact: CONTACT MAY CAUSE EYE IRRITATION.  
Chronic Effects: NONE CURRENTLY KNOWN.  
Other Hazard: NONE CURRENTLY KNOWN.

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: DELAY ABSORPTION OF NITRATES BY GIVING WATER, MILK OR ACTIVATED CHARCOAL. THEN, REMOVE BY GASTRIC LAVAGE OR EMESIS. CONSULT A PHYSICIAN IMMEDIATELY.  
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 AND THE CLINICAL CONDITION OF THE PATIENT. INGESTION MAY RESULT IN CORROSIVE DAMAGE TO THE DIGESTIVE TRACT.

VI. REACTIVITY

Stability: Stable  
Conditions to Avoid: AREAS OF EXTREME HEAT.  
Polymerization: Will Not Occur  
Conditions to Avoid: AREAS OF EXTREME HEAT.  
Incompatibility material: HYPOCHLORITE BLEACH, STRONG ACIDS AND ALKALIS.  
Hazardous Combustion: MAY DECOMPOSE TO CYANURIC ACID, AMMONIA, HYDROGEN CYANIDE AND NITROGEN OXIDES UNDER FIRE CONDITIONS.

Material Safety Data Sheet

Effective Date: 19-APR-2000  
Product: PRO-MATE TURF NECTAR

-----  
VII. 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: IF MIST CONCENTRATIONS EXCEED RECOMMENDED PERMISSIBLE EXPOSURE LIMITS, USE NIOSH-APPROVED RESPIRATOR.

Ventilation: LOCAL EXHAUST NORMALLY SUFFICIENT

Gloves: IMPERVIOUS

Eyes: CHEMICAL WORKERS 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. PROTECT AGAINST PHYSICAL DAMAGE. STORE IN COOL, DRY PLACE, SEPARATE FROM COMBUSTIBLE, ORGANIC OR OTHER READILY OXIDIZABLE MATERIALS. AVOID STORAGE ON WOOD FLOORS. IMMEDIATELY REMOVE AND DISPOSE OF ANY SPILLED MATERIAL.

Other precaution: A) RCRA HAZARDOUS WASTE NUMBER: NOT LISTED  
B) SARA TITLE III, SECTION 313: NOT LISTED  
C) SARA THRESHOLD PLANNING QUANTITY: NOT LISTED  
D) CERCLA REPORTING QUANTITY: 1,560 GALLONS.  
E) 49 CFR 172.101, APPENDIX A: HAZARDOUS SUBSTANCE  
F) 49 CFR 172.101, APPENDIX B: NOT LISTED

-----  
X. SHIPPING INFORMATION  
-----

Shipping name: NOT REGULATED BY DOT, UNLESS THERE ARE 1,560

Helena Chemical Company  
PH: 901-761-0050  
CHEMTREC: 800-424-9300

17-MAY-2002 11:08:37  
Page 4 Of 4

Material Safety Data Sheet

Effective Date: 19-APR-2000  
Product: PRO-MATE TURF NECTAR

-----  
GALLONS IN A SINGLE CONTAINER.

Hazard Class: NONE  
Identification No: NONE  
Labels Required: NONE REQUIRED  
Placarding: NONE REQUIRED  
Freight Class: COMPOUND, FERTILIZER (MANUFACTURED FERTILIZER)  
LIQUID, NOIBN

Chemical Name	Equivalent R.Q.
-----	-----
FERROUS SULFATE	1000 LB (454 KG)
ZINC SULFATE	1000 LB (454 KG)

-----  
XI. GENERAL PRODUCT INFORMATION  
-----

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

Health: 2                      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  
Helena Chemical Company believes that the data contained herein is factual.  
This data is not to be taken as a warranty or representation of legal  
responsibility. It is offered solely for your consideration, investigation  
and verification.