

E M SCIENCE, A DIV OF E M INDUSTRIES INC. -- UREA ITEM NUMBER 0400600 -- 6810-00-782-6521  
===== Product Identification =====

Product ID:UREA ITEM NUMBER 0400600

MSDS Date:03/01/1990

FSC:6810

NIIN:00-782-6521

MSDS Number: BMZXC

=== Responsible Party ===

Company Name:E M SCIENCE, A DIV OF E M INDUSTRIES INC.

Address:111 WOODCREST RD

City:CHERRY HILL

State:NJ

ZIP:08034-0395

Country:US

Info Phone Num:

609-354-9200 FAX: 609-423-4389

Emergency Phone Num:609-354-9200 OR 800-424-9300

CAGE:EO379

=== Contractor Identification ===

Company Name:CURTIN MATHESON SCIENTIFIC INC

Address:2140 NEW MARKET ST PKY SUITE 120

Box:7809

City:MARIETTA

State:GA

ZIP:30065

Country:US

Phone:800-424-9300 (CHEMTREC)

CAGE:0B026

Company Name:E M SCIENCE DIV OF E M INDUSTRIES INC

Address:480 DEMOCRAT ROAD

Box:70

City:GIBBSTOWN

State:NJ

ZIP:08027

Country:US

Phone:800-222-0342/609-423-6300

CAGE:63612

Company Name:E M SCIENC

E, A DIV OF E M INDUSTRIES INC.  
Address:111 WOODCREST RD  
Box:70  
City:CHERRY HILL  
State:NJ  
ZIP:08034-0395  
Country:US  
Phone:609-354-9200 FAX: 609-423-4389  
CAGE:EO379

=====  
Composition/Information on Ingredients  
=====

Ingred Name:UREA  
CAS:57-13-6  
RTECS #:YR6250000  
Fraction by Wt: 100%  
Other REC Limits:NONE SPECIFIED

=====  
Hazards Identification  
=====

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 8210 MG/KG  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: MAY BE HARMFUL IF SWALLOWED.  
CONTACT WITH HEATED MATERIAL MAY CAUSE THERMAL BURNS. DUST  
INHALATION MAY IRRITATE NASAL AND RESPIRATORY PASSAGES.MAY CAUSE  
IRRITATION OF SKIN, EYES OR MUCOUS MEMBRANES ON CONTACT. CHRONIC:  
NONE SPECIFIED BY MANUFACTURER.  
Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1%  
OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.  
Effects of Overexposure:INHALATION: COUGHING, WHEEZING, SHORTNESS OF  
BREATH, SNEEZING. EYES: REDNESS, TEARING, BLURRED VISION. SKIN:  
REDNESS, RASH, ITCHING. INGESTED: NAUSEA, VOMITING.  
Medical Cond Aggravated by Exposure:PRE-EXISTING RESPIRATORY CONDITIONS  
MAY BE AGGRAVATED BY EXPOSURE.

=====  
First Aid Measures  
=====

First Aid:GET MEDICAL ATTENTION FOR ALL CASES OF OVEREXPOSURE.  
INHALATION: REMOVE PERSON TO FRESH AIR. RESUSCITATE

AS NEEDED.

EYES: FLUSH WITH LOTS OF WATER FOR 15 MINUTES. SKIN: FLUSH WITH LOTS OF WATER. INGESTED: IF CONSCIOUS DRINK WATER, AND INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL.

=====  
Fire Fighting Measures  
=====

Flash Point:NONCOMBUSTIBLE

Extinguishing Media:MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR.

Unusual Fire/Explosion Hazard:TOXIC FUMES FORMED ON THERMAL

DECOMPOSITION. REACTS WITH SODIUM HYPOCHLORITE OR CALCIUM HYPOCHLORITE TO FORM EXPLOSIVE NITROGEN TRICHLORIDE.

=====  
Accidental Release Measures  
=====

Spill Release Procedures:SWEEP OR SCOOP UP AND PLACE IN A CONTAINER FOR LATER DISPOSAL

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

=====  
Handling and Storage  
=====

Handling and Storage Precautions:KEEP CONTAINER CLOSED. STORE AT CONTROLLED ROOM TEMPERATURE.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

=====  
Exposure Controls/Personal Protection  
=====

Respiratory Protection:NONE NORMALLY REQUIRED.

Ventilation:USE ADEQUATE LOCAL VENTILATION OR ADEQUATE MECHANICAL VENTILATION.

Protective Gloves:BUTYL OR EQUIVALENT

Eye Protection:SAFETY GLASSES WITH SIDE SHIELDS

Other Protective Equipment:EYE WASH STATION & SAFETY SHOWER

Work Hygienic Practices:WASH THOROUGHLY AFTER USE AND BEFORE EATING, DRINKING, OR SMOOKING.

Supplemental Safety and Health

DO NOT TAKE INTERNALLY. DO NOT GET IN EYES, ON SKIN, OR CLOTHES.

=====  
Physical/Chemical Properties  
=====

HCC:N1

Boiling Pt:B.P. Text:DECOMPOSES

Melt/Freeze Pt:M.P/F.P Text:270F,132C

Spec Gravity:1.335

Solubility in Water:APPRECIABLE

Appearance and Odor:WHITE CRYSTALS

Percent Volatiles by Volume:0

=====  
Stability and Reactivity Data  
=====

Stability Indicator/Materials to Avoid:YES  
STRONG OXIDIZING AG

ENTS, SODIUM NITRARE, PHOSPHOROUS CHLORIDE (P2CL5),  
NITROSYL PERCHLORATE

Stability Condition to Avoid:HEAT

Hazardous Decomposition Products:AMMONIA AND OXIDES OF NITROGEN AND  
CARBON.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND  
FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department

of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.