

DU PONT E I DE NEMOURS & CO INC -- KARMEX DF HERBICIDE -- 6840-01-341-9346

===== Product Identification =====

Product ID:KARMEX DF HERBICIDE

MSDS Date:11/21/1996

FSC:6840

NIIN:01-341-9346

Status Code:A

MSDS Number: CLBXF

=== Responsible Party ===

Company Name:DU PONT E I DE NEMOURS & CO INC

Address:1007 MARKET STREET

Box:1635

City:WILMINGTON

State:DE

ZIP:19898

Country:US

Info Phone Num:800-441-751

5/MSDS 302-992-3511

Emergency Phone Num:800-441-3637/800-424-9300(CHEMTREC)

CAGE:18873

=== Contractor Identification ===

Company Name:DU PONT FLUOROPRODUCTS

Address:1007 MARKET STREET

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:1-800-441-7515

CAGE:2S827

Company Name:E.I. DUPONT DE NEMOURS & CO

Address:1007 MARKET STREET

Box:City:WILMINGTON

State:DE

ZIP:19898

Country:US

Phone:800-441-7515;800-441-9442

CAGE:18873

Company Name:EHRlich J C CHEMICAL CO INC

Address:500 SPRING RIDGE DR

Box:

City:READING
State:PA
ZIP:19612-3848
Country:US
Phone:610-372-9700/FAX: 610-378-9744
CAGE:8C885
Company Name:TIMBERLAND ENTERPRISES INC
Address:140 ARKANSAS ST
Box:557
City:MONTICELLO
State:AR
ZIP:71655
Country:US
Phone:501-367-8561
CAGE:1HB45

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

Ingred Name:DIURON
CAS:330-54-1
RTECS #:YS8925000
Fraction by Wt: 80%
Other REC Limits:1MG/M3, 8&12HR.
ACGIH TLV:10 MG/M3 8HR,TWA A4
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name
:INERT INGREDIENTS
RTECS #:II1000082
Fraction by Wt: 20%

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

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:CAUTION: HARMFUL IF SWALLOWED OR
ABSORBED THROUGH SKIN. CAUSES MODERATE EYE IRRITATION. AVOID
CONTACT WITH EYES, SKIN, AND CLOTHING. NO REPORTS OF HUMAN
SENSITIZATION. SIGNIFICANT SKIN PERMIATION AFTE R CONTACT APPEARS
UNLIKELY.
Explanation of Carcinogenicity:NONE
Effec

ts of Overexposure:ORAL: CONSIDERED SLIGHTLY TOXIC. SKIN: SLIGHTLY TO MODERATELY TOXIC BY CONTACT. ANIMAL STUDIES INDICATE THIS PRODUCT IS A MILD SKIN IRRITANT, BUT NOT A SENSITZER. INHAL: VERY LOW TOXICITY BY INHAL. EY E: PRODUCED MILD TO MODERATE CORNEAL OPACITY, MILD CONJUNCTURAL REDNESS AND SLIGHT TO MILD CHEMOSIS IN UNWASHED RABBIT EYES. EYES NORMAL WITHIN 14 DAYS AFTER EXPOSURE. CONSIDERED MILD EYE IRRITANT.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PRE-EXISTING

DISEASES OF THE LIVER, BONE MARROW MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

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

First Aid:INHAL: REMOVE TO FRESH AIR.CALL DR.SKIN:FLUSH W/COPIOUS AMOUNTS H2O & SOAP.CALL DR.EYES: FLUSH W/WATER FOR 15 MINUTES, LIFT LIDS TO RINSE ENTIRE EYE.CALL DR IMMED.INGEST:IF CONSCIOUS, GIVE 1-2 GLASSE S H2O TO DRINK.INDUCE VOMITING TOUCHINGBACK OF THROAT W/FINGER.IF PERSON IS UNCONSCIOUS, DON'T GIVE ANYTHING BY MOUTH & DON'T INDUCE VOMITING.CALL DR. *NOTES TO DR: EXCESSIVE ABSORBTION MAY CAUSE FORM ATION OF METHEMOGLOBIN THAT CAUSES CYANOSIS. SINCE REVERSION OF METHEMOGLOBIN TO HEMOGLOBIN OCCURS SPONTNSLY, TREAT MODERT CYANOSIS W/SUPPORTIVE MEASRS: BED REST & OXYGEN INHAL.***CONT UNDER ECOLOGIC AL SECTION

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

Autoignition Temp:=455.C, 851.F

Lower Limits:0.70%

Extinguishing Media:W

ATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL.

Fire Fighting Procedures:WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS. USE WATER SPRAY. IF AREA IS HEAVILY EXPOSED TO FIRE, AND CONDITIONS PERMIT, LET FIRE BURN ITSELF OUT SINCE WATER MAY INC REASE CONTAMINATION HAZARD.

Unusual Fire/Explosion Hazard:AS WITH ORGANIC POWDERS OR CRYSTALS, UNDER DUSTING CONDITIONS, THIS MATERIAL MAY FORM EXPLOSIVE MIXTURES IN AIR.

===== Accidental R

Release Measures =====

Spill Release Procedures: SHOVEL OR SWEEP SPILLED MATERIAL. DIKE SPILL. PREVENT MATERIAL FROM ENTERING SEWERS OR WATERWAYS OR LOW AREAS. EVACUATE PERSONEL. THOROUGHLY VENTILATE AREA. USE SELF CONTAINED BREATHING APPARATUS. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT DURING CLEAN UP.

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

Handling and Storage Precautions: STORE IN ORIGINAL CONTAINER ONLY. DON'TT CONTAMINATE H2O, OTHER PESTICIDES, FOOD, OR FEED IN STORAGE. AVOID BREATHING VAPORS/MISTS, DUST. AVOID CONTACT W/EYES, SKIN, CLOTHING. WASH THOROUGHLY AFTER HANDLING. DO NOT STORE/CONSUME FOOD, DRINK, OR TABACCO WHERE THEY MAY BECOME CONTAMINATED W/MATERIAL.

Other Precautions: CONTNR DISPOSAL: COMPLETELY EMPTY BAG INTO APPLICATION EQUIPMENT. THEN DISPOSE OF BAG IN SANITARY LANDFILL, INCINERATION, OR, IF PERMITTED BY STATE AUTHORITIES, BY BURNING. IF BURNED, STAY OUT OF SMOKE .

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

Respiratory Protection: USE ONLY WITH ADEQUATE VENTILATION.
Ventilation: USE ONLY WITH ADEQUATE VENTILATION
Protective Gloves: WATER PROOF GLOVES
Other Protective Equipment: LONG SLEEVED SHIRT AND LONG PANTS, SHOES, SOCKS, AND COVERALLS.
Work Hygienic Practices: DO NOT STORE OR CONSUME FOOD, DRINK, OR TABACCO WHERE THEY MAY BECOME CONTAMINATED WITH THIS MATERIAL. USERS SHOULD WASH HANDS BEFORE EATING, DRINKING, CHEWING GUM, USING TABACCO, OR USING TOILET.

Supplemental Safety and Health
ALWAYS FOLLOW LABEL INSTRUCTIONS WHEN USING PRODUCT. DISCARD CLOTHING AND OTHER ABSORBANT MATERIALS THAT HAVE BEEN DRENCHED OR HEAVILY CONTAMINATED W/ PRODUCT'S CONCENTRATE. DO NOT REUSE THEM. FOLLOW MANFR'S INSTRUCTIONS FOR WASHABLES. USE DETERGENT & HOT H2O.

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

Solubility in Water: DISPERSIBLE
Appearance and Odor: BROWN GRANULES - ODORLESS

=====

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

Stability Indicator/Materials to Avoid: YES
INCOMPATIBLE WITH STRONG ACIDS.

===== Toxicological Information =====

Toxicological Information: PRODUCT AS WHOLE: ORAL LD50(RAT): 2900MG/KG
BODY WEIGHT. DERMAL LD50: >2000 MG/KG RABBITS. INHAL: 4 HOUR LC50:
>5.6 MG/L RATS. CHRONIC STUDIES: DIURON: THE COMPOUND IS A
SKIN/EYE IRRITANT. BUT IS NOT A SKIN SENSITIZER IN ANIMALS. TOXIC
EFFECTS IN ANIMALS FROM SHORT EXPOSURES INCLUDE: BLOOD EFFECTS,
SPLEEN EFFECTS, THYROID EFFECTS, METHEMOGLOBINEMIA, AND NONSPECIFIC
EFFECTS SUCH AS WEIGHT LOSS, AND IRRITANT. TESTS IN SOME ANIMALS
DEMONSTRATE CARCINOGENIC ACTIVITY. TESTS IN ANIMALS EXHIBIT NO
EMBRYOTOXIC ACTIVITY @ CONCENTRATIONS EQUAL TO OR LESS THAN THE TLV
OF 10MG/M3. ***SEE "OTHER INFORMATION".

===== Ecological Information =====

Ecological: EPA REG NO. 352-508. AQUATIC TOXICITY: DIURON IS CONSIDERED
MODERATELY TOXIC. 96 HOUR LC50, RAINBOW TROUT: 3.5 PPM. ****CONTAMINATION
FROM FIRST AID: NOTES TO DRUGGIST: THOROUGH CLEANSING OF ENTIRE CONTAMINATED
AREA OF BODY (INCL SCALP/NAI LS) IS UTMOST IMPORTANT. SEVERE
CYANOSIS: INTRAVENOUS INJECTION OF METHYLENE BLUE, 1MG/KG BODY
WEIGHT, MAY BE VALUABLE. CYANOCOBALAMINE (VIT B12), 1MG
INTRAMUSCULARLY MAY SPEED RECOVERY. INTRAVENOUS FLUIDS/BLOOD
TRANSFUSIONS MAY BE INDICATED IN SEVERE EXPOSURES.

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

Waste Disposal Methods: TREATMENT, STORAGE, TRANSPORTATION, AND DISPOSAL
MUST BE IN ACCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS. REMOVE
NONUSABLE SOLID MATERIAL AND/OR CONTAMINATED SOIL FOR DISPOSAL IN
AN APPROVED LANDFILL. DO NOT FLUSH TO SURFACE WATER OR SANITARY
SEWER SYSTEM. DO NOT CONTAMINATE ENVIRONMENT.

===== MSDS Transport Information =====

Transport Information: IF PRODUCT IS 100 LBS OR MORE, DIURON

N PER

PACKAGE, THE PRODUCT IS REGULATED BY DOT. WHEN PRODUCT IS IN A LIQUID STATE (AS WHEN MIXED WITH WATER FOR APPLICATION) AND THE CONTAINER IS HOLDING MORE THAN 100 LBS OF DIURON, AND THE PERCENTAGE OF DIURON EXCEEDS 0.2 (2000 PPM) THEN IT IS REGULATED. IF PRODUCT MUST BE REGULATED, SEE MANUFACTURER'S HARDCOPY OF MSDS FOR INFO.

=====
===== Regulatory Information =====

SARA Title III Information:DIURON

State Regulatory Information:THIS PRO

DUCT DOES FALL UNDER TITLE 3

HAZARD CLASSIFICATION "ACUTE" AND "CHRONIC" FOR SECTIONS 311, 312. IN THE US, THIS PRODUCT IS REGULATED BY THE EPA UNDER THE FEDERAL INSECTACIDE, FUNGUCIDE ACT. IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTANT WITH ITS LABELING. EPA REG NO. 352-508. SARA/CERLA REPORTABLE QUANTITY: DIURON (100 LBS)

=====
===== Other Information =====

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.