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 PURCHASING OFFICE  
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 WHITEWATER WI 53190-1705

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DATE: 09/27/94  
 CUST#: 2-097-94816  
 PO#: UNE-51497

M A T E R I A L   S A F E T Y   D A T A   S H E E T                      P A G E   1

SECTION 1. ----- CHEMICAL IDENTIFICATION -----

PRODUCT #: D7763                      NAME: 3-(3,4-DICHLOROPHENYL)-1,1-DIMETHYLUREA

SECTION 2. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

CAS #: 330-54-1  
 MF: C9H10CL2N2O1

SYNONYMS

AF 101 \* CEKIURON \* CRISURON \* DAILON \* DCMU \* DIATER \*  
 DICHLORFENIDIM \* 3-(3,4-DICHLOROPHENOL)-1,1-DIMETHYLUREA \* N-(3,4-  
 DICHLOROPHENYL)-N,N-DIMETHYLUREA \* 3-(3,4-DICHLOROPHENYL)-1,1-  
 DIMETHYLUREA \* 1-(3,4-DICHLOROPHENYL)-3,3-DIMETHYLUREE (FRENCH) \* 3-  
 (3,4-DICHLOROPHENYL)-1,1-DIMETHYL-HARNSTOFF (GERMAN) \* 3-(3,4-  
 DICHLOROPHENYL)-1,1-DIMETHYLUREUM (DUTCH) \* 3-(3,4-DICHLOROPHENYL)-1,1-  
 DIMETIL-UREA (ITALIAN) \* 1,1-DIMETHYL-3-(3,4-DICHLOROPHENYL)UREA \* DI-  
 URON \* DIREX 4L \* DIUMATE \* DIUREX \* DIURON \* DIURON 4L \* DIURON (OSHA)  
 \* DMU \* DP HARDENER 95 \* DREXEL \* DREXEL DIURON 4L \* DURAN \* DYNEX \*  
 FARMCO DIURON \* HERBATOX \* HW 920 \* KARMEX \* KARMEX DIURON HERBICIDE \*  
 KARMEX DW \* HARNER \* SUP'R FLO \* TELVAR \* TELVAR DIURON WEED KILLER \*  
 TIGREX \* UNIDRON \* UROX D \* USAF P-7 \* USAF XR-42 \* VONDURON \*

SECTION 3. ----- HAZARDS IDENTIFICATION -----

LABEL PRECAUTIONARY STATEMENTS

HARMFUL  
 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.  
 IRRITATING TO EYES AND RESPIRATORY SYSTEM.  
 MAY CAUSE SENSITIZATION BY SKIN CONTACT.  
 TARGET ORGAN(S):  
 LIVER  
 KIDNEYS  
 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF  
 WATER AND SEEK MEDICAL ADVICE.  
 WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. ----- FIRST-AID MEASURES -----

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS  
 AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED  
 CLOTHING AND SHOES.  
 IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
 RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
 IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CONTINUED ON NEXT PAGE

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M A T E R I A L   S A F E T Y   D A T A   S H E E T                      P A G E   2

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NAME: 3-(3,4-DICHLOROPHENYL)-1,1-DIMETHYLUREA

CALL A PHYSICIAN.  
 WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

EXTINGUISHING MEDIA  
 WATER SPRAY.  
 CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.  
 SPECIAL FIREFIGHTING PROCEDURES  
 WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO  
 PREVENT CONTACT WITH SKIN AND EYES.  
 UNUSUAL FIRE AND EXPLOSIONS HAZARDS  
 EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES -----

EVACUATE AREA.  
 WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY  
 RUBBER GLOVES.  
 SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.  
 AVOID RAISING DUST.  
 VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. ----- HANDLING AND STORAGE -----

REFER TO SECTION 8.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION -----

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT  
 GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.  
 SAFETY SHOWER AND EYE BATH.  
 USE ONLY IN A CHEMICAL FUME HOOD.  
 DO NOT BREATHE DUST.  
 DO NOT GET IN EYES, ON SKIN, ON CLOTHING.  
 AVOID PROLONGED OR REPEATED EXPOSURE.  
 WASH THOROUGHLY AFTER HANDLING.  
 HARMFUL SOLID.  
 IRRITANT.  
 SENSITIZER.

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KEEP TIGHTLY CLOSED.  
STORE IN A COOL DRY PLACE.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----

APPEARANCE AND ODOR

SOLID.  
MELTING POINT: 158 C TO 159 C  
VAPOR PRESSURE: <0.01MM 20 C  
SOLUBILITY: WATER- 42 MG/L @ 25 C

ACETONE- 53 G/KG

SECTION 10. ----- STABILITY AND REACTIVITY -----

STABILITY

STABLE.

INCOMPATIBILITIES

STRONG OXIDIZING AGENTS  
STRONG ACIDS  
STRONG BASES

DO NOT HEAT ABOVE M.P.

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

TOXIC FUMES OF:  
CARBON MONOXIDE, CARBON DIOXIDE  
NITROGEN OXIDES  
HYDROGEN CHLORIDE GAS

HAZARDOUS POLYMERIZATION

WILL NOT OCCUR.

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

ACUTE EFFECTS

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.  
CAUSES EYE IRRITATION.  
MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER  
RESPIRATORY TRACT.  
MAY CAUSE SKIN IRRITATION.  
MAY CAUSE ALLERGIC SKIN REACTION.  
EXPOSURE CAN CAUSE:  
CNS DEPRESSION  
GASTROINTESTINAL DISTURBANCES

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DAMAGE TO THE LIVER  
 DAMAGE TO THE KIDNEYS  
 BLOOD EFFECTS  
 TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND  
 TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS NO: YS9925000

UREA, 3-(3,4-DICHLOROPHENYL)-1,1-DIMETHYL-  
 TOXICITY DATA

ORL-RAT LD50: 1017 MG/KG  
 SKN-RAT LD50: >5 GM/KG  
 UNR-RAT LD50: 3400 MG/KG  
 IPR-MUS LD50: 500 MG/KG  
 UNR-DCK LD50: >2 GM/KG

JAFCAU 18,1104,70  
 FMCHA2 -,C115,91  
 30ZDA9 -,231,71  
 NTIS\*\* AD277-689  
 FMCHA2 -,C115,91

TARGET ORGAN DATA

BEHAVIORAL (GENERAL ANESTHETIC)  
 BEHAVIORAL (ATAXIA)  
 EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)  
 EFFECTS ON EMBRYO OR FETUS (FETAL DEATH)  
 SPECIFIC DEVELOPMENTAL ABNORMALITIES (EYE, EAR)  
 SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)

ADDITIONAL INFORMATION

ORL-RAT LD50: 3400 MG/KG  
 ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES  
 (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR  
 COMPLETE INFORMATION.

SECTION 12. ----- ECOLOGICAL INFORMATION -----  
 DATA NOT YET AVAILABLE.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A  
 CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.  
 OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. ----- TRANSPORT INFORMATION -----

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. ----- REGULATORY INFORMATION -----

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REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 10 MG/M3  
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION  
FEREAC 54,7740,89  
OSHA PEL FINAL: 8H TWA 10 MG/M3  
FEREAC 54,2923,89  
OEL-AUSTRALIA: TWA 10 MG/M3 JAN93  
OEL-BELGIUM: TWA 10 MG/M3 JAN93  
OEL-DENMARK: TWA 5 MG/M3 JAN93  
OEL-FINLAND: TWA 10 MG/M3; STEL 20 MG/M3 JAN93  
OEL-FRANCE: TWA 10 MG/M3 JAN93  
OEL-THE NETHERLANDS: TWA 10 MG/M3 JAN93  
OEL-SWITZERLAND: TWA 10 MG/M3 JAN93  
OEL-UNITED KINGDOM: TWA 10 MG/M3 JAN93  
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK ACGIH TLV  
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK ACGIH TLV  
NIOSH REL TO DIURON-AIR: 10H TWA 10 MG/M3  
NIOSH\* DHHS #92-100,92  
NOHS 1974: HZO M0785; NIS 2; TNF 120; NOS 2; TNE 374  
NOES 1983: HZO M0785; NIS 7; TNF 70; NOS 12; TNE 4132; TFE 264  
EPA GENETOX PROGRAM 1988, NEGATIVE: S CEREVISIAE GENE CONVERSION  
EPA TSCA CHEMICAL INVENTORY, JUNE 1993  
EPA TSCA SECTION 8(E) STATUS REPORT BEHQ-0981-0409  
ON EPA IRIS DATABASE  
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JANUARY 1994

SECTION 16. - - - - - OTHER INFORMATION - - - - -

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