

CYTEC INDUSTRIES INC -- CONATHANE CE-1164 URETHANE PREPOLYMER -- 5970-00-090-9184
===== Product Identification =====

Product ID:CONATHANE CE-1164 URETHANE PREPOLYMER

MSDS Date:04/18/2000

FSC:5970

NIIN:00-090-9184

Status Code:A

MSDS Number: CLDNR

=== Responsible Party ===

Company Name:CYTEC INDUSTRIES INC

Address:FIVE GARRET MOUNTAIN PLAZA

City:WEST PATERSON

State:NJ

ZIP:07424

Country:US

Info Phon

e Num:800-652-6013

Emergency Phone Num:800-652-6013

Resp. Party Other MSDS Num.:MSDS NO: 06152

Preparer's Name:RANDY DESKIN, PHD, DABT

Chemtec Ind/Phone:(800)424-9300

CAGE:0V7G8

=== Contractor Identification ===

Company Name:CYTEC INDUSTRIES INC

Address:FIVE GARRET MOUNTAIN PLAZA

Box:City:WEST PATERSON

State:NJ

ZIP:07424

Country:US

Phone:800-652-6013

CAGE:0V7G8

Company Name:THE SMITH GROUP INC.

Address:811 E. CAYUGA STREET

Box:City:PHILADELPHIA

State:PA

ZIP:19124-3893

Country:US

Phone:215-743-8

200
Contract Num:SP0430-01-M-NF84
CAGE:2B613

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Composition/Information on Ingredients
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Ingred Name:TOLUENE
CAS:108-88-3
RTECS #:XS5250000
< Wt:13.
OSHA PEL:200 PPM
ACGIH TLV:50 PPM (SKIN)
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:XYLENE
CAS:1330-20-7
RTECS #:ZE2100000
< Wt:10.
OSHA PEL:100 PPM
ACGIH TLV:100 PPM
ACGIH STEL:150 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:ETHYLBENZENE
CAS:100-41-4
RTECS #:DA0700000
< Wt:3.
OSHA PEL:1
00 PPM
ACGIH TLV:100 PPM
ACGIH STEL:125 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:TOLUENE DIISOCYANATE
CAS:26471-62-5
RTECS #:NQ9490000
< Wt:3.
OSHA PEL:0.02 PPM C
ACGIH TLV:0.005 PPM
ACGIH STEL:0.02 PPM
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

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Hazards Identification
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LD50 LC50 Mixture:EST. ORAL RAT LD50: > 4,000 MG/KG
Reports of Carcinogenicity:NTP:YES IARC:YES
Health Hazards Acute and Chronic:DIRECT CONTACT WITH THIS MATERIAL

MAY

CAUSE MODERATE EYE AND SKIN IRRITATION. INHALATION OVEREXPOSURE MAY CAUSE IRRITATION OF THE RESPIRATORY TRACT AND EYES. MAY CAUSE ALLERGIC RESPIRATORY REACTION. REPEATED OR PROLONGED DERMAL CONTACT WITH THIS MATERIAL MAY CAUSE ALLERGIC SKIN REACTIONS.

Explanation of Carcinogenicity:IARC -2B: TOLUENE DIISOCYANATE : THE AGENT IS POSSIBLY CANCINOGENIC TO HUMANS. NTP-2: TOLUENE DIISOCYANATE: THE SUBSTANCE MAY REASONABLY BE ANTICIPATED TO BE CARCINOGENS.

Effects of O

overexposure:EYES: IRRITATION. SKIN: IRRITATION, ALLERGIC SKIN REACTION. INHALATION: ALLERGIC RESPIRATORY REACTION, IRRITATION OF RESPIRATORY TRACT.

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

First Aid:EYE CONTACT: IRRIGATE WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. SKIN CONTACT: WASH AFFECTED AREAS WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES. OBTAIN MEDICAL ATTENTION. DESTROY OR THOROUGHLY CLEAN SHOES

AND
LAUNDRY CLOTHING BEFORE REUSE. INHALATION: MOVE FROM EXPOSURE. GIVE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF PERSON NOT BREATHING. GET MEDICAL ATTENTION. INGESTION: IF MORE THAN 15 CC ARE SWALLOWED, INDUCE VOMITING AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH OR INDUCE VOMITING IN AN UNCONSCIOUS PERSON .

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

Flash Point Method:TCC

Flash Point:>7.2C, 45.F

Lower

Limits:NOT AVAILABL

Upper Limits:NOT AVAILABL

Extinguishing Media:USE CARBON DIOXIDE, DRY CHEMICAL, WATER SPRAY, OR ALCOHOL FOAM TO EXTINGUISH FIRES. IF WATER SPRAY OR ALCOHOL FOAM IS USED, IT SHOULD BE IN LARGE QUANTITIES.

Fire Fighting Procedures:USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL. WEAR SELF CONTAINED POSITIVE PRESSURE BREATHING APPARATUS AND FULL FIREFIGHTING PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:WATER OR ALCOHOL FOAM MAY REACT VIGOROUSLY WITH HO

THIOCYANATE RELEASING CARBON DIOXIDE. DO NOT RESEAL CONTAMINATED CONTAINERS SINCE PRESSURE BUILD-UP MAY CAUSE RUPTURE.

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

Spill Release Procedures: REMOVE SOURCES OF IGNITION. IF EXPOSURE LEVEL NOT KNOWN, WEAR NIOSH APPROVED, POSITIVE PRESSURE, SELF-CONTAINED RESPIRATOR. IF EXPOSURE LEVEL KNOWN, WEAR NIOSH APPROVED RESPIRATOR SUITABLE FOR LEVEL OF EXPOSURE. IN ADDITION TO PROTECTIVE CLOTHING/EQUIPMENT, WEAR IMPERVIOUS BOOTS. COVER SPILLS WITH INERT ABSORBENT MATERIAL; SWEEP UP AND PLACE IN WASTE DISPOSAL CONTAINER. FLUSH AREA WITH WATER.

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

Handling and Storage Precautions: KEEP AWAY FROM HEAT, SPARKS AND FLAME. AVOID BREATHING VAPOR. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. AVOID CONTACT WITH EYES. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING. DO NOT ALLOW WATER OR OTHER LIQUIDS TO

GET INTO CONTAINER.

Other Precautions: AREAS CONTAINING THIS MATERIAL SHOULD HAVE FIRE-SAFE PRACTICES AND ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ELECTRICAL AND FIRE PROTECTION CODES (NFPA-30) GOVERNING CLASS 1 FLAMMABLE LIQUIDS AND OSHA INSTRUCTION STD 1-5.14A AND STATE AND LOCAL REQUIREMENTS.

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

Respiratory Protection: WHERE EXPOSURES EXCEED THE PEL, USE RESPIRATOR APPROVED BY NIOSH FOR THE MATERIAL AND LEVEL OF EXPOSURE. WHERE EXPOSURES ARE BELOW THE PERMISSIBLE EXPOSURE LIMIT (PEL), NO RESPIRATORY PROTECTION IS REQUIRED.

Ventilation: WHERE THIS MATERIAL IS NOT USED IN A CLOSED SYSTEM, GOOD ENCLOSED EXHAUST VENTILATION SHOULD BE PROVIDED TO CONTROL EXPOSURE.

Protective Gloves: IMPERVIOUS GLOVES ARE RECOMMENDED TO PREVENT SKIN CONTACT.

Eye Protection: WEAR CHEMICAL SPLASH PROOF GOGGLES OR FACE-SHIELD FOR SPLASHING OPERATIONS.

Other Protective Equipment: EYEWASH AND SAFETY SHOWER

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PROVIDED. PROTECTIVE CLOTHING SUCH AS IMPERVIOUS GLOVES, APRON, WORKPANTS, LONG SLEEVE WORK SHIRT, OR DISPOSABLE COVERALLS RECOMMENDED TO PREVENT SKIN CONTACT.

Work Hygienic Practices:FOOD, BEVERAGES, AND TOBACCO PRODUCTS SHOULD NOT BE CARRIED, STORED, OR CONSUMED WHERE THIS MATERIAL IS IN USE. BEFORE EATING, DRINKING, OR SMOKING, WASH FACE AND HANDS WITH SOAP AND WATER.

Supplemental Safety and Health

AVOID SKIN CONTACT. RECOMMENDED THAT SHOWER BE TAKEN AFTER COMPLETION

OF WORKSHIFT ESPECIALLY IF SIGNIFICANT CONTACT HAS OCCURRED. LAUNDRY WORK CLOTHING PRIOR TO REUSE. STREET CLOTHING SHOULD BE STORED SEPARATELY FROM WORK CLOTHING AND PROTECTIVE EQUIPMENT. WORK CLOTHING AND SHOES SHOULD NOT BE TAKEN HOME.

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

HCC:F2

Boiling Pt:B.P. Text:NOT AVAILABLE

Melt/Freeze Pt:M.P/F.P Text:NOT AVAILABLE

Decomp Temp:Decomp Text:NOT AVAILABLE

Vapor Pres:NOT AVAILABLE

Spec Gravity:1.0

3

pH:NOT AVAILABLE

Viscosity:NONE PROVIDED BY MFR.

Evaporation Rate & Reference:< 1

Solubility in Water:REACTS WITH WATER.

Appearance and Odor:LOW VISCOSITY AMBER LIQUID, CHARACTERISTIC ODOR.

Percent Volatiles by Volume:50% BY WT.

Corrosion Rate:NONE PROVIDED BY MFR

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

Stability Indicator/Materials to Avoid:YES

STRONG ACIDS, BASES, OR AMINES, OXIDIZING AGENTS.

Stability Condition to Avoid:NONE KNOWN

Hazardous Decomposition Pr

oducts:THERMAL DECOMPOSITION OR COMBUSTION

MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN CYANIDE, OXIDES OF NITROGEN, AND/OR TDI.

Conditions to Avoid Polymerization:MAY OCCUR. AVOID CONTACT WITH OXIDIZING AGENTS.

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

Toxicological Information:WARNING! FLAMMABLE LIQUID AND VAPOR. CONTAINS TOLUENE DIISOCYANATE (TDI). VAPOR EXTREMELY IRRITATING. HARMFUL IF INHALED. MAY CAUSE ALLERGIC SKIN OR RESPIRATORY REA

CTION. CAUSES

EYE IRRITATION. CONTAMINATION OR EXCESSIVE HEAT MAY RESULT IN DANGEROUS PRESSURE. CHRONIC HAZARD WARNING: CHRONIC TOXICITY HAZARD. CONTAINS TDI WHICH MAY CAUSE RESPIRATORY SYSTEM DAMAGE. TDI CAUSED CANCER IN LABORATORY ANIMAL TESTS. CONTAINS MATERIAL WHICH CAUSED REPRODUCTIVE DISORDERS IN LABORATORY ANIMAL TESTS. RISK DEPENDS ON DURATION AND LEVEL OF EXPOSURE.

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Ecological Information
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Ecological:NO AQUATIC LC50

, BOD, OR COD DATA AVAILABLE. THE FOLLOWING

COMPONENTS MAY BE SUBJECT TO REPORTING REQUIREMENTS PURSUANT TO SECTION 313 OF CERCLA (40 CFR 372), SECTION 12(B) OF TSCA, OR MAY BE SUBJECT TO RELEASE REPORTING REQUIREMENTS (40 CFR 307, 40 CFR 311, ETC). SEE SECTION 13 OF MANUFACTURER'S MSDS FOR INFORMATION ON WASTE CLASSIFICATION AND WASTE DISPOSAL OF THIS PRODUCT. TOLUENE:

TPQ(LBS)= NONE; RQ(LBS)= 1,000; S313 = YES; TSCA 12B= NO. XYLENE:

TPQ= NONE; RQ(LBS)= 100; S313= Y

ES; TSCA 12B= NO. ETHYLBENZENE:

TPQ=NONE; RQ= 1,000; S313= YES; TSCA 12B= NO.TOLUENE DIISOCYANATE:

TPQ= 500 LBS; R Q= 100 LBS; S313= YES; TSCA 12B= NO.

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Disposal Considerations
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Waste Disposal Methods:CYTEC ENCOURAGES RECYCLE, RECOVERY, AND REUSE OF MATERIALS, AS AN ALTERNATE TO DISPOSAL AS A WASTE. CYTEC RECOMMENDS THAT ORGANIC MATERIALS CLASSIFIED AS RCRA HAZARDOUS WASTES BE DISPOSED OF BY THERMAL TREATMENT OR INCINERATION AT EPA APPROVED

FACILITIES. PERSON GENERATING THE WASTE IS RESPONSIBLE FOR DETERMINING DISPOSAL METHOD.

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MSDS Transport Information
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Transport Information:D.O.T. PSN: FLAMMABLE LIQUID, N.O.S.; CLASS: 3; PKG: 11; UN 1993; REPORTABLE QUANTITY: TOLUENE DIISOCYANATE = 3,333 LBS, ETHYL BENZENE= 33,333 LBS, TOLUENE/XYLENE= 7,692/1,000 LBS; LABEL: FLAMMABLE LIQUID. IMO: PSN: FLAMMABLE LIQUID, N.O.S., CLASS: 3.2; PKG: 11; UN 1993; IMDG PAGE

3230; LABEL: FLAMMABLE
LIQUID. ICAO/IATA: PSN: FLAMMABLE LIQUID, N.O.S.; CLASS: 3; UN
1993; PKG: I I; LABEL: FLAMMABLE LIQUID; PACKING INSTR: PASS.=
305, CARGO= 307; MAX NET QTY: PASS.= 5L, CARGO= 60L. TRANSPORT
CANADA: PSN: FLAMMABLE LIQUID, N.O.S.; CLASS; 3; UN 1993; PKG I I;
LABEL: FLAMMABLE LIQUID. [N.O.S. NAME : (TOLUENE, XYLENE)].

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

SARA Title III Information:PRODUCT CLASSIFICATION UNDER SECTION 311
OF

SARA: ACUTE: YES; CHRONIC: YES; FIRE: YES; REACTIVE: NO; PRESSURE:
NO.

Federal Regulatory Information:US TSCA: THIS PRODUCT IS MANUFACTURED IN
COMPLIANCE WITH ALL PROVISIONS OF THE TOXIC SUBSTANCES CONTROL ACT,
15 U.S.C. 2601 ET. SEQ.

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

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