

CONAP INC. -- CONETHANE EN-9OZR, PART A -- 5970-01-276-0966

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

Product ID:CONETHANE EN-9OZR, PART A

MSDS Date:05/25/1989

FSC:5970

NIIN:01-276-0966

Kit Part:Y

MSDS Number: BHWDV

=== Responsible Party ===

Company Name:CONAP INC.

Address:1405 BUFFALO STREET

City:OLEAN

State:NY

ZIP:14760

Country:US

Info Phone Num:716-372-9650

Emergency Phone Num:716-372-9650

Preparer's

Name:GEORGE C. CARPIN

CAGE:16245

=== Contractor Identification ===

Company Name:CONAP INC.,WHOLLY OWNED SUBSIDIARY OF CYTEC INDUSTRIES
INC.

Address:1405 BUFFALO STREET

Box:City:OLEAN

State:NY

ZIP:14760

Country:US

Phone:716-372-9650

CAGE:16245

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

Ingred Name:TOLUENE-2,4-DIISOCYANATE (TDI) (SARA III)

CAS:584-84-9

RTECS #:CZ6300000

Fraction by Wt: 85%

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

LD50

LC50 Mixture:LC50 (RAT-4 HOURS)=16-50 PPM (SEE SUPP)

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazards Acute and Chronic:LIQUID IS SEVERELY IRRITATING TO BODY TISSUES. TOLUENE DIISOCYANATE MAY SENSITIZE SEVERE ALLERGIC REACTIONS SUCH AS A CHEMICAL ASTHMA. PEL FOR TDI IS BELOW THE ODOR THRESHOLD. SOLVENTS ARE ABSORBED BY THE SKIN AND WITH CHRONIC OVEREXPOSUREMAY CAUSE PERMANENT CENTRAL NERVOUS SYSTEM DAMAGE KNOWN AS PAINTERS SYNDROME.

Explanation of Carcinogenicity:TOLUENE DIISOCYANATE IS LISTED BY NTP AND IARC. SEE INDIVIDUAL REPORTS FOR DETAILS.

Effects of Overexposure:EYE: SEVERE IRRITATION. SKIN:IRRITATION, DERMATITIS, SENSITIZED DERMATITIS. INHALED:RESPIRATORY IRRITATION, FLU-LIKE SYMPTOMS, ASTHMA, SENSITIZING, NARCOSIS, LOSS OF APPETITE. INGESTED:G/I IRRITATION, HEADACHE,NAUSEA,VOMITING,DIARRHEA.

Medical Cond Aggravated by Exposure:SINCE TDI SENSITIZES DERMAL AND

RESPIRATORY ALLERGYS, PEOPLE WITH ISOCYANATE SENSITIZATION, OR DERMATITIS, ASTHMA, AND OTHER SIMILAR DISORDERS SUCH AS EMPHYSEMA, ECZEMA, ETC. MAY BE AT INCREASED RISK.

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

First Aid:EYE:FLUSH W/WATER 15 MIN HOLD LIDS OPEN. SEE A DOCTOR. SKIN:REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. WASH WITH SOAP & WATER. INHALED:REMOVE TO FRESH AIR. RESTORE BREATHING IF NECESSARY. GET MEDICAL CARE AS ASTHMATIC SYMPTOMS MAY DEVELOP EITHER IMMEDIATELY OR BE DELAYED SEVERAL HOURS. INGESTED:DO NOT INDUCE VOMITING. GIVE MILK OR WATER TO DRINK IF CONSCIOUS. GET IMMEDIATE MEDICAL CARE

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

Flash Point Method:PMCC

Flash Point:>260F,>127C

Extinguishing Media:USE CARBON DIOXIDE, FOAM, DRY CHEMICAL, OR WATER FOG.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING C

HEMICAL FIRE. USE WATER

SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:FIRE OR EXCESSIVE HEAT MAY CAUSE

PRODUCTION OF HIGHLY TOXIC DECOMPOSITION PRODUCTS, AND/OR PRESSURES
SUFFICIENT TO RUPTURE THE CONTAINERS.

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

Spill Release Procedures:ALWAYS USE APPROPRIATE PERSONAL PROTECTIVE
EQUIPMENT. COVER SPILL WITH SAWDUST,VERMICULITE,ETC. ADD LIQUID
DECONTAMINANT AND ALLOW TO SET FOR

AT LEAST 10 MIN. COLLECT

MATERIAL IN OPEN CONTAINERS AND ADD MORE DECONTAMINANT.

Neutralizing Agent:WATER WITH 2-5% DETERGENT AND 0-10% AMMONIA. SEE
SUPP DATA FOR ALTERNATE.

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

Handling and Storage Precautions:STORE TIGHTLY CLOSED IN A DRY AREA.

STORE BETWEEN 32-122F (50-81F, IDEAL). PROTECT FROM MOISTURE.

PRODUCT WILL POLYMERIZE SLOWLY AT HIGHER TEMPERATURE

Other Precautions:'EMPTY' CONTAINERS MAY CONTAIN RESID

UE OR VAPOR.

TREAT THEM WITH THE RESPECT DUE FULL ONES. DO NOT CUT,WELD,ETC. ON
THEM.

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

Respiratory Protection:USE POSITIVE PRESSURE AIR SUPPLIED RESPIRATOR

ANY TIME THE EXPOSURE IS ABOVE THE CIELING, SHORT TERM EXPOSURE
LEVEL,OR PEL, AND AT ALL TIMES DURING SPRAYING OPERATIONS. OTHER
RESPIRATORS MAY BE USED F OR SHORT (1 HOUR) EXPOSURES ONLY!!

Ventilation:GENERAL VENTILATION SUPPLEMENTED WITH LOCAL EXHAUST,
AS

NEEDED TO MAINTAIN EXPOSURES BELOW PEL/TLV.

Protective Gloves:RUBBER,VINYL OR OTHER IMPERVIOUS

Eye Protection:GOGGLES OR FACE SHIELD **NO CONTACTS!!*

Other Protective Equipment:EYE WASH STATION & SAFETY SHOWER. COVER AS
MUCH SKIN AS POSSIBLE DURING OPERATIONS.

Work Hygienic Practices:USE STRICT CHEMICAL HYGIENE PRACTICES. AVOID
ALL CONTACT POSSIBLE. WASH THOROUGHLY AFTER USING.

Supplemental Safety and Health

THIS IS PART B OF A TWO PART KIT. LD50 = 5800 MG/KG. INHALATION AND

SKIN CONTACT ARE MOST DAMAGING EXPOSURES. ALTERNATE DECONTAMINANT:
20% TERGITOL TMN-10 IN WATER.

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

HCC:T3

Spec Gravity:1.06

pH:UNKNON

Solubility in Water:REACTS WITH WATER

Appearance and Odor:AMBER LIQUID, SHARP PUNGENT ODOR

Percent Volatiles by Volume:NIL

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

Stability Indicator/Materials to Avoid:YES

WATER, SHORT CHAIN ALCOHOLS, AND AMINES.

Stability Co

ndition to Avoid:TEMPERATURES IN EXCESS OF THOSE PUBLISHED
IN THE PRODUCT LITERATURE.

Hazardous Decomposition Products:CARBON DIOXIDE, CARBON MONOXIDE,
TRACES ON HYDROGEN CYANIDE, OXIDES OF NITROGEN, TOLUENE
DIISOCYANATE.

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

Waste Disposal Methods:DISPOSE I/A/W FEDERAL,STATE,LOCAL REGULATIONS.

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

This information is formulated for use by elements o

f 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.