

DEFT, INC. -- TYPE I, ALIPHATIC ISOCYNATE CAT MIL-PRF-85285C -- 8010-01-397-3944

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

Product ID:TYPE I, ALIPHATIC ISOCYNATE CAT MIL-PRF-85285C

MSDS Date:10/15/1997

FSC:8010

NIIN:01-397-3944

Status Code:A

MSDS Number: CLKTC

=== Responsible Party ===

Company Name:DEFT, INC.

Address:17451 VON KARMAN AVE

City:IRVINE

State:CA

ZIP:92614

Country:US

Info Phone Num:949-474-

0400

Emergency Phone Num:800-424-9300

Preparer's Name:RYAN MICKELSON

CAGE:33461

=== Contractor Identification ===

Company Name:DEFT, INC.

Address:17451 VON KARMAN AVE

City:IRVINE

State:CA

ZIP:92614

Country:US

Phone:949-474-0400

CAGE:33461

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

Ingred Name:POLYMERIC HEXAMETHYLENE DISOCYANAT

CAS:28182-81-2

Code:F

RTECS #:NQ9170000

= Wt:45.

Ingred Name:HEXAMETHYLENE DIISOCYANATE

CAS:822-06-0

RTECS #:MO1740000

ACGIH TLV:0.034 MG/M3;

.005 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:TOLUENE
CAS:108-88-3
RTECS #:XS5250000
= Wt:15.
OSHA PEL:SEE TABLE Z-2
ACGIH TLV:188 MG/M3;50 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:METHYL ETHYL KETONE
CAS:78-93-3
RTECS #:EL6475000
= Wt:20.
OSHA PEL:590 MG/M3;200 PPM
ACGIH TLV:590 MG/M3;200 PPM
ACGIH STEL:885 MG/M3;300 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

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

Routes of Entry: Inhalation:YES Sk
in:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE: VAPORS ARE IRRITATING TO EYES,
NOSE, AND THROAT. INHALATION MAY CAUSE HEADACHES, DIFFICULT
BREATHING AND LOSS OF CONSCIOUSNESS. CHRONIC: AS A RESULT OF
PREVIOUS REPEATED OVEREXPOSURE OR A SINGLE LARGE DOSE, CERTAIN
INDIVIDUALS WILL DEVELOP ISOCYANATE SENSITIZATION WHICH WILL CAUSE
THEM TO REACT TO A LATER EXPOSURE OF ISOCYANATE LEVELS WELL BELOW
THE TLV VALUE
OF ISOCYNATES.
Effects of Overexposure:INHALATION: IRRITATION OF THE RESPIRATORY TRACT
AND ACUTE NERVOUS SYSTEM DEPRESSION CHARECTERIZED BY THE FOLLOWING
PROGRESSIVE STEPS: HEADACHE, DIZZINESS, STAGGERING GAIT, CONFUSION,
UNCONSCIOUS OR CO MA. SKIN AND EYE CONTACT: SKIN: ISOCYNATES REACT
WITH SKIN AND PROTEIN AND MOISTURE AND CAN CAUSE IRRITATION.
SYMPTOMS MAY BE SWELLING, REDNESS, AND RASH. EYES: LIQUID,
AERESOLS, OR VAPORS ARE IRRIT ATING AND MAY CAUSE TEARING, REDNE

SS,
AND SWELLING ACCOMPANIED BY A STINGING SENSATION. SKIN
ABSORPTION: PROLONGED OR REPEATED CONTACT CAN CAUSE MODERATE
IRRITATION, DRYING, AND DEFATTING OF THE SKIN WHICH CAN CAUSE THE
SKIN TO CRACK. IN

Medical Cond Aggravated by Exposure: ASTHMA AND ANY OTHER RESPIRATORY
DISORDERS SKIN ALLERGIES, ECZEMA, AND DERMATITIS, ISOCYANATES
SENSITIZATION

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

First Aid: INHALATION: MOVE TO AN AREA FREE FROM RISK OF
FURTHER

EXPOSURE. RESTORE BREATHING. ASTHMATIC TYPE SYMPTOMS MAY DEVELOP
AND MAY BE IMMEDIATE OR DELAYED BY SEVERAL HOURS. OBTAIN MEDICAL
ATTENTION. SKIN : REMOVE CONTAMINATED CLOTHING. WASH AFFECTED
AREAS THOROUGHLY WITH SOAP AND WATER WASH CONTAMINATED CLOTHING.
WASH AFFECTED AREAS THOROUGHLY BEFORE REUSE EYES: FLUSH WITH CLEAN
LUKEWARM WATER (LOW PRESSURE) FOR AT LEAST 15 MINUTES,
OCCASIONALLY LIFTING EYELIDS. OBTAIN MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE

VOMITING. DO NOT GIVE ANYTHING TO AN
UNCONSCIOUS PERSON. OBTAIN MEDICAL ATTENTION.

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

Flash Point Method: TCC

Flash Point: =7.2C, 45.F

Lower Limits: 1.00%

Upper Limits: 8.00%

Extinguishing Media: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG,
WATER SPRAY

Fire Fighting Procedures: FULL FIRE FIGHTING EQUIPMENT WITH
SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING
SHOULD BE WORN BY FIRE FIGHTERS WATER

ER MAY BE USED TO COOL CLOSED

CONTAINERS TO PREVENT PRESSURE BUILD-UP, AUTO IGNITION OR
EXPLOSION. DURING A FIRE HAZARDOUS VAPORS AND OTHER IRRITATING VAPORS MAY
BE GENERATED BY COMBUSTION OR T

Unusual Fire/Explosion Hazard: KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE
FROM HEAT, SPARKS, ELECTRICAL EQUIPMENT AND OPEN FLAME. CLOSED
CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. APPLICATION TO
HOT SURFACES REQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY
CONDITIONS OVEREXPOSURE

RE TO DECOMPOSITION PRODUCTS MAY CAUSE A
HEALTH HAZARD. SYMPTOMS MAY

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

Spill Release Procedures:EVACUATE ALL NON-ESSENTIAL PERSONNEL. REMOVE ALL SOURCES OF IGNITION (FLAME, SPARK SOURCES, HOT SURFACES). VENTILATE AREA CONTAIN AND REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

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

Handling and Storage Precautions:STORE IN BUILDINGS DESIGNED TO COMPLY

WITH OSHA 1910.106 AVOID STORING NEAR HIGH TEMPERATURES, FIRE, OPEN FLAMES, AND SPARK SOURCES. STORE IN TIGHTLY CLOSED CONTAINERS. STORE IN WELL VENTILATED AREAS.

Other Precautions:KEEP CONTAINERS TIGHT AND UPRIGHT TO PREVENT LEAKAGE, PREVENT PROLONGED BREATHING OF VAPORS OF SPRAY MISTS. PROLONGED OVEREXPOSURE MAY CAUSE AN ALLERGIC REACTION. AVOID CONTACT WITH SKIN AND EYES. DO NOT TAKE INTERNALLY. DO NOT HANDLE UNTIL THE MANUFACTURERS SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.
WASH HANDS

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

Respiratory Protection:A RESPIRATOR THAT IS RECOMMENDED OR APPROVED FOR USE IN AN ORGANIC VAPOR ENVIRONMENT (AIR PURIFYING OR FRESH AIR SUPPLIED) IS NECESSARY. OBSERVE OSHA REGULATIONS FOR RESPIRATOR USE. VENTILATION SHOULD BE PROVIDED TO KEEP EXPOSURE LEVELS BELOW THE OSHA PERMISSIBLE LIMITS. AN AIR SUPPLIED RESPIRATOR IS RECOMMENDED. A VAPOR PARTICULATE RESPIRATOR

(TC23C NIOSH/M

Ventilation:EXHAUST VENTILATION SUFFICIENT TO KEEP THE AIRBORNE CONCENTRATIONS OF SOLVENT, HDI AND POLYISOCYANATES BELOW

Protective Gloves:COTTON, NEOPRENE, RUBBER, POLYETHYLENE

Eye Protection:SPLASH GUARDS, SIDE SHIELDS, CHEMICAL GOGGLES OR FACE SHIELDS.

Other Protective Equipment:THE USE OF LONG SLEEVE AND LONG LEG CLOTHING IS RECOMMENDED.

Supplemental Safety and Health

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

Boiling Pt:B.P. Text:230-4

26 DEG F
Spec Gravity:0.93397
Evaporation Rate & Reference:1.39
Solubility in Water:INSOLUBLE
Appearance and Odor:AMBER LIQUID WITH SOLVENT ODOR

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

Stability Indicator/Materials to Avoid:YES
WATER, AMINES, STRONG BASES, ALCOHOLS, METAL COMPOUNDS AND SURFACE
ACTIVE MATERIALS.
Stability Condition to Avoid:CONTACT WITH MOISTURE, MATERIAL WHICH
REACT WITH ISOCYNATES AND HIGH TEMPERATURES
Hazardous Decomposition Products:B
Y HIGH HEAT/TEMPERATURES: CARBON
MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN, TRACES OF HCN AND
HDI.

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

Waste Disposal Methods:WASTE MUST BE DISPOSED OF IN ACCORDANCE WITH
FEDERAL, STATE, AND LOCAL ENVIROMENTAL CONTROL REGULATIONS. EMPTY
CONTAINERS MUST BE HANDLED WITH CARE, DUE TO PRODUCT RESIDUES AND
FLAMMABLE VAPOR DO NOT INCINERATE CLOSED CONTAINERS.

===== Regulatory Information ==
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SARA Title III Information:THIS PRODUCT CONTAINS THE FOLLOWING TOXIC
CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF
THE EMERGENCY PLANNING AND COMMUNITY TO KNOW 1986 AND 40 CFR 372:
108-83-3 TOLUENE, 108-20-3 METHYL ISOBUTYL KETONE
State Regulatory Information:THIS PRODUCT CONTAINS A CHEMICAL KNOWN BY
THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER
REPRODUCTIVE HARM. 108-83-3.

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