

DEFT, INC. -- TYPE I ALIPHATIC ISOCYANATE MIL-PRF-85285C(MIL-C-85285B) -- 8010-01-265-9143

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

Product ID:TYPE I ALIPHATIC ISOCYANATE MIL-PRF-85285C(MIL-C-85285B)

MSDS Date:10/14/1997

FSC:8010

NIIN:01-265-9143

Status Code:A

MSDS Number: CLLTM

=== 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:HENRY SIMMONS

Chemtrec Ind/Phone:(800)424-9300

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:N-BUTYL ACETATE

CAS:123-86-4

RTECS #:AF7350000

< Wt:5.

OSHA PEL:710 MG/M3;150 PPM

ACGIH TLV:713 MG/M3;150 PPM

ACGIH STEL:9

50 MG/M3;200 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:METHYL N-PROPYL KETONE
CAS:107-87-9
RTECS #:SA7875000
= Wt:45.
OSHA PEL:700 MG/M3;200 PPM
ACGIH TLV:705 MG/M3;200 PPM
ACGIH STEL:881 MG/M3;250 PPM

Ingred Name:ETHYL 3-ETHOXYPROPIONATE
CAS:763-69-9
RTECS #:UF3325000
= Wt:5.

Ingred Name:DIBASIC ESTER 5
CAS:1119-40-0
< Wt:5.

Ingred Name:ISOCYANIC ACID, HEXAMETHYLENE ESTER, POLYMERS
CAS:28182-81-2
RTECS #:NQ9170000
= Wt:40.

Ingred Name:LIGHT AROMATIC SOLVENT NAPHTHA (PETR
OLEUM)
CAS:64742-95-6
RTECS #:WF3400000
< Wt:5.

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

Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
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 HEADACHE, DIFFICULT
BREATHING AND LOSS OF CONSCIOUSNESS. CHRONIC: AS A RESULT OF
PREVIOUS REPEATED OVEREXPOSURE OR A SINGLE LARGE DOSE, CERTAIN

INDIVIDUALS WITH DEVELOP ISOCYANATE SENSITIZATION WHICH WILL CAUSE THEM TO REACT TO A LATER EXPOSURE OF ISOCYANATE LEVELS BELOW THE TLV VALUE OF ISOCYANATES.

Effects of Overexposure:INHALATION: IRRITATION OF THE RESPIRATORY TRACT & ACUTE NERVOUS SYSTEM DEPRESSION. SKIN AND EYE CONTACT: ISOCYANATE REACT WITH PROTEIN AND MOISTURE AND CAUSE IRRITATION. SYMPTOMS MAY BE SWELLING, REDNESS, AND RASH. EYES: LIQUID, AEROSOLS OR VAPORS ARE IRRITATING AND MAY CAUSE TEARING, REDNESS, AND SWELLING

ACCOMPANIED BY A STINGING SENSATION. SKIN ABSORPTION: PROLONGED AND REPEATED CONTACT CAN CAUSE MODERATE IRRITATION, DRYING, AND DEFATTING OF THE SKIN WHICH CAN CAUSE THE SKIN TO CRACK. INGESTION: CAN RESULT IN IRRITATION AND POSSIBLE CORROSIVE ACTION IN THE MOUTH, STOMACH TISSUE AND DIGESTIVE TRACT.

Medical Condition Aggravated by Exposure:ASTHMA AND OTHER RESPIRATORY DISORDERS. SKIN ALLERGIES, ECZEMA, AND DERMATITIS. ISOCYANATE 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 CONDITION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH AFFECTED AREAS THOROUGHLY WITH SOAP AND WATER. WASH CONTAMINATED CLOTHES 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:=-7.8C, 46.F

Lower Limits:0.90%

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

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 R

EQUIRES SPECIAL PRECAUTIONS. DURING EMERGENCY CONDITIONS OVEREXPOSURES TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD.

===== 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 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 OR 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 UN DERSTOOD.

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

Respiratory Protection:A RESPIRATOR THAT IS RECOMMENDED OR APPROVED FOR USED IN AN ORGANIC VAPOR ENVIRONMENT (AIR PURIFYING OR FRESH AIR SUPPLIED) IS NECESSARY. OBSERVE OHSA REGULATIONS FOR RESPIRATOR USE.

Ventilation:EXHAUST VENTILATION SUFFICIENT TO KEEP THE AIRBORNE CONCENTRATION OF SOLVENT, HDI AND POLYISOCYANATE BELOW THE

IR

RESPECTIVE TLV'S MUST BE UTILIZED.

Protective Gloves:PROTECTIVE GLOVES ARE RECOMMENDED

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

Other Protective Equipment:THE USE OF LONG SLEEVES AND LONG LEG

CLOTHING IS RECOMMENDED. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE.

Supplemental Safety and Health

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

Boiling Pt:=100.6C, 213.F

B.P. Text:213-437F

Vapor Density:> AIR

Spec Gravity:

.94958

VOC Pounds/Gallon:550

VOC Grams/Liter:7.91

Viscosity:THIN TO HEAVY MATERIAL

Evaporation Rate & Reference:1.49 X N-BUTYL ACETATE

Solubility in Water:INSOLUBLE

Appearance and Odor:AMBER LIQUID WITH SOLVENT ODOR

Percent Volatiles by Volume:65.8%

===== 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 MO

ISTURE, MATERIAL WHICH

REACT WITH ISOCYANATES AND HIGH TEMPERATURES.

Hazardous Decomposition Products: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 ENVIRONMENTAL CONTROL REGULATIONS. EMPTY CONTAINERS MUST BE HANDLE WITH CARE, DUE TO PRODUCT RESIDUE AND FLAMMABLE VAPOR. DO NOT INCI

NERATE CLOSED CONTAINERS.

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.