

DEFT, INC. -- TYPE I, ALIPHATIC ISOCYANATE CAT.MIL-PRF-85285C, 15044,TY I -- 8010-01-329-8709  
===== Product Identification =====

Product ID:TYPE I, ALIPHATIC ISOCYANATE CAT.MIL-PRF-85285C, 15044,TY I

MSDS Date:07/01/1999

FSC:8010

NIIN:01-329-8709

Status Code:A

MSDS Number: CLKST

=== 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:C8&10 AROMATIC HYDROCARBONS

CAS:64742-95-6

Code:F

RTECS #:WF3400000

= Wt:15.

Ingred Name:POLYMERIC HEXAMETHYLENE DIISOCYANAT

CAS:28182-81-2

Code:F

RTE

CS #:NQ9170000  
= Wt:50.

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:N-BUTYL ACETATE  
CAS:123-86-4  
RTECS #:AF7350000  
&lt; Wt:5.  
OSHA PEL:710 MG/M3;150 PPM  
ACGIH TLV:713 MG/M3;150 PPM  
ACGIH STEL:950 MG/M3;200 PPM  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:METHYL N-AMYL KETONE  
CAS:110-43-0  
RTECS #:MJ5075000  
= Wt:35.  
OSHA PEL:465 MG/M3;100 PPM  
ACGIH TLV:233 MG/M3;50 PPM

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

Routes of Entry: Inhalation:YES Skin: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  
USE  
THEM TO REACT TO A LATER EXPOSURE OF ISOCYANATE LEVELS WELL BELOW  
THE TLV VALUE OF ISOCYANATES.

Effects of Overexposure:INHALATION: IRRITATION OF THE RESPIRATORY TRACT  
& ACUTE NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY THE FOLLOWING  
PROGRESSIVE STEPS: HEADACHE, DIZZINESS, STAGGERING GAIT, CONFUSION,  
UNCONSCIOUSNESS OR COMA. SKIN AND EYE CONTACT: SKIN: ISOCYANATES  
REACT WITH SKIN PROTEIN AND MOISTURE AND CAN CAUSE IRRITATION.  
SYMPTOMS MAY BE SWELLING, REDNESS, AND RA

SH. EYES: LIQUID,

RESOLS, OR VAPORS ARE IRRITATING AND MAY CAUSE TEARING, REDNESS 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. INGESTION

Medical Condition Aggravated by Exposure: ASTHMA AND ANY OTHER RESPIRATORY DISORDERS. SKIN ALLERGIES, ECZEMA, AND DERMATITIS. ISOCYANATE SENSITIZATION.

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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 AREA THOROUGHLY WITH SOAP AND WATER. WASH CONTAMINATED CLOTHING 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.

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Fire Fighting Measures =====

Flash Point Method: TCC

Flash Point: =24.4C, 76.F

Lower Limits: 1.00%

Upper Limits: 7.90%

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

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

Spill Release Procedures: STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED  
OR SPILLED 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  
TOOL

LS.

===== 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

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 RECOMMENDED. A VAPOR PARTICULATE RESPIRATOR (TC23C NIOSH/MSHA)  
MAY BE APPROPRIATE WHERE AIR MONITORING DEMONSTRATES

Ventilation: EXHAUST VENTILATION SUFFICIENT TO KEEP THE AIRBORNE  
CONCENTRATIONS OF SOLVENT, HDI AND POLYISOCYANATES BELOW THEIR  
RESPECTIVE TLV'S MUST BE UTILIZED

Protective Gloves: COTTON, NEOPRENE, RUBBER, POLYETHYLENE

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

Other Protective Equipment: THE USE OF LONG

SLEEVE AND LONG LEG CLOTHING

IS RECOMMENDED. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

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

Boiling Pt:B.P. Text:260-335 DEG F

Spec Gravity:0.97119

Evaporation Rate & Reference:0.27 X N-BUTYL ACETATE

Solubility in Water:INSOLUBLE

Appearance and Odor:AMBER LIQUID WITH SOLVENT ODOR

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

Stability Indicator/Materials to A

void:YES

WATER, AMINES, STRONG BASES, ALCOHOLS, METAL COMPOUNDS AND SURFACE ACTIVE MATERIALS.

Stability Condition to Avoid:CONTACT WITH MOISTURE, MATERIAL WHICH REACT WITH ISOCYONATES AND HIGH TEMPERATURES.

Hazardous Decomposition Products:BY HIGH HEAT/TEMPERATURE. 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 RESIDUE AND FLAMMABLE VAPOR. DO NOT INCINERATE CLOSED CONTAINERS.

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

State Regulatory Information:

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