

DEFT, INC. -- TYPE 1, ALIPHATIC ISOCYANATE -- 8010-01-397-3944

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

Product ID:TYPE 1, ALIPHATIC ISOCYANATE

MSDS Date:10/15/1997

FSC:8010

NIIN:01-397-3944

Status Code:A

MSDS Number: CLQQV

=== 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:800-424-93

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Preparer's Name:ERNEST CARTER

Chemtrek 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: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 ISOBUTYL KETONE

CAS:

108-10-1

RTECS #:SA9275000

= Wt:40.

OSHA PEL:410 MG/M3;100 PPM

ACGIH TLV:205 MG/M3;50 PPM

ACGIH STEL:307 MG/M3;75 PPM

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:1,3,5-TRIS(6-HYDROXYHEXYL)BIURET TRIISOCYANATE

CAS:4035-89-6

RTECS #:NR0195000

= Wt:45.

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

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

Health Hazards Acute and Chronic:VAPORS ARE IRRITATION TO EYES, NOSE
AND THROAT. INHALATION MAY CAUSE HEADACHES

, DIFFICULT BREATHING AND

LOSS OF CONSCIOUSNESS. 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
ISOCYANATES.

Effects of Overexposure:INHALATION: IRRITATION OF THE RESPIRATORY TRACT
& ACUTE NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY THE FOLLOWING
PROGRESSIVE STEPS: HEADACHE, DIZZINESS, STAG

GERING GAIT, CONFUSION,

UNCONSCIOUSNESS OR COMA. SKIN: ISOCYANATES REACT WITH SKIN PROTEIN
AND MOISTURE AND CAN CAUSE IRRITATION. SYMPTOMS MAY BE SWELLING,
REDNESS, AND RASH. EYES: LIQUID, AEROSOLS, OR VAPORS ARE IRRITATING
AND MAY CAUSE TEARI NG, REDNESS, AND SWELLING ACCOMPANIED BY A
STINGING SENSATION. INGESTION: ACUTE: CAN RESULT IN IRRITATION AND
POSSIBLE CORROSIVE ACTION IN THE MOUTH, STOMACH TISSUE AND
DIGESTIVE TRACT. VOMITING MAY C AUSE ASPIRATION OF THE SOLV

ENT,

RESULT

Medical Cond 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 AREAS

THOROUGHLY WITH SOAP AND WATER, WASH CONTAMINATED CLOTHING THOROUGHLY BEFORE REUSE. EYES: FLUSH WITH LUKE WARM 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 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

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.

===== 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 LEA

KAGE.

PREVENT PROLONGED BREATHING OF VAPORS OR SPRAY MISTS. PROLONGED OVEREXPOSURE MAY CAUSE AN ALLERGIC REACTIO. AVOID CONTACT WITH SKIN AND EYES. DO N OT TAKE INTERNALLY. DO NOT HANDLE UNTIL THE MANUFACTURERS SAFETY PRECAUTIONS HAVE BEEN READ AND UNDE RSTOOD. WASH HANDS B

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===== 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 APPROVED TO KEEP EXPOSURE LEVELS BELOW THE OSHA PERMISSIBLE LIMITS.

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

Protective Gloves:PROTECTIVE GLOVES ARE RECOMMENDED (COTTON, NEOPRENE, RUBBER, POLYETHYLENE) TO P

Eye Protection:SPLASH GUARDS OR SIDE SHIELDS, CHEMI CAL 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

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

Boiling Pt:B.P. Text:230-428 DEG.F

Vapor Density:HEAVIER

VOC Pounds/Gallon:495

VOC Grams/Liter:7.78

Viscosity:THIN LIQUID TO HEAVY

Evaporation Rate & Reference:1.39

Solubility in Water:INSOLUBLE

Appearance and Odor:AM

BER LIQUID WITH SOLVENT ODOR.

Percent Volatiles by Volume:61.2%

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===== 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 ISOCYANATES AND HIGH TEMPERATURES.

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN, TRACES OF HCN AND HDI.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

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

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

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 =====

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

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