Product ID:CAT, MIL-C-83286,30117 PART B MSDS Date:07/19/1991 FSC:8010 NIIN:01-053-0584 Kit Part:Y MSDS Number: BRKKC === Responsible Party === **Company Name: DEFT INC** Address:17451 VON KARMAN AVENUE City:IRVINE State:CA ZIP:92714 Country:US Info Phone Num:714-474-0400 Emergency Phone Num:714-474-0400 8 00-424-9300(CHEMTREC) Preparer's Name:NORM GAUL CAGE:33458 === Contractor Identification === **Company Name: DEFT INC** Address:17451 VON KARMAN AVE City:IRVINE State:CA ZIP:92714-6205 Country:US Phone:800 424-9300 CAGE:33458 Company Name: DEFT, INC. Address:17451 VON KARMAN AVE City:IRVINE State:CA ZIP:92614 Country:US Phone:949-474-0400 CAGE:33461

Ingred Name: ALIPHATIC ISOCYANATE OF HEXAMETHYLENE DIISOCYANATE (HDI) CAS: 28182-81-

2 RTECS #:HQ9170000 Fraction by Wt: 30% Other REC Limits:NOT SPECIFIED

Ingred Name:XYLENE (SARA 313) (VAPOR PRESSURE 21 MM HG @ 100F) CAS:1330-20-7 RTECS #:ZE2100000 Fraction by Wt: < 5% Other REC Limits:NONE SPECIFIED OSHA PEL:100 PPM/STEL 150 PPM ACGIH TLV:100 PPM/STEL 150 PPM EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:N-BUTYL ACETATE (VAPOR PRESSURE 13 MM HG @ 68F) CAS:123-86-4 RTECS #:AF7350000 Fraction by Wt: < 5% Other REC Limits:NONE SPECIFIED OSHA PEL:150 PPM/STEL 200 PPM AC GIH TLV:150 PPM/STEL 200 PPM EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:ETHYL BENZENE (SARA 313) (VAPOR PRESSURE 7.1 MM HG @ 68F) CAS:100-41-4 RTECS #:DA0700000 Fraction by Wt: < 1% Other REC Limits:NONE SPECIFIED OSHA PEL:100 PPM/STEL 125 PPM ACGIH TLV:100 PPM/STEL 125 PPM EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:TOLUENE (SARA 313) (VAPOR PRESSURE 22 MM HG @ 68F) CAS:108-88-3 RTECS #:XS5250000 Fraction by Wt: < 5% Other REC Limits:NONE SPECIFIED OSHA PEL:200 PPM/150 ST EL ACGIH TLV:50 PPM; 9293 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:ETHYL-3-ETHOXYPROPIONATE (VAPOR PRESSURE .7 MM HG @ 68F) CAS:763-69-9 RTECS #:UF3325000 Fraction by Wt: 5% Other REC Limits:50 PPM/STEL 100 PPM

Ingred Name:METHYL ISOBUTYL KETONE (SARA 313) (VAPOR PRESSURE 15 MM HG @ 68F) CAS:108-10-1 RTECS #:SA9275000 Fraction by Wt: 10% Other REC Limits:NONE SPECIFIED OSHA PEL:100 PPM/75 STEL ACGIH TLV:50 PPM/75 STEL; 9293 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Nam e:METHYL ETHYL KETONE (SARA 313) (VAPOR PRESSURE 70 MM HG @ 68F) CAS:78-93-3 RTECS #:EL6475000 Fraction by Wt: 45% Other REC Limits:NONE SPECIFIED OSHA PEL:200 PPM/STEL 300 PPM ACGIH TLV:200 PPM/STEL 300 PPM EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:VOC: 633 G/L RTECS #:9999999VO Other REC Limits:NONE SPECIFIED

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO Reports of Carcinogenicity:NTP:NO IARC:N

O OSHA:NO

Health Hazards Acute and Chronic:ACUTE: INGESTION: CAN RESULT IN IRRITATION & POSSIBLE CORROSIVE ACTION IN THE MOUTH, STOMACH TISSUE & DIGESTIVE TRACT. VOMITING MAY CAUSE ASPIRATION OF THE SOLVENT RESULTING IN CHEMICAL PNEUMONITIS. V APORS ARE IRRITATING TO EYES, NOSE & THROAT. INHALED CAUSE HEADACHES, DIFFICULT BREATHING & LOSS OF CONSCIOUSNESS.

Explanation of Carcinogenicity:PROP 65-WARNING:THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIF TO CAU

SE BIRTH

DEFECTS/REPRODUCTIVE HARM

Effects of Overexposure:INHALATION: IRRITATION RESPIRATORY TRACT. HEADACHE, DIZZINESS, STAGGERING GAIT, CONFUSION, UNCONSCIOUSNESS/COMA. SKIN: IRRITATION. SWELLING, REDNESS, RASH. EYES: LIQUID, AREOSOLS, VAPORS IRRITAING CAU SE TEARING, REDNESS, SWELLING, STINGING. SKIN ABSORP: CAUSE MODERATE IRRITATION,

DRYING/CRACKING DUE TO DEFATTING ACTION

Medical Cond Aggravated by Exposure:ASTHMA AND ANY OTHER RESPIRATORY DISORDERS. SKIN ALLERG

IES, ECZEMA, AND DERMATITIS. ISOCYANATE SENSITIZATION. NERVOUS SYSTEM DEPRESSION.

First Aid:INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION. SKIN: WASH AFFECTED AREAS WITH SOAP & WATER. EYES: FLUSH WITH CLEAN LUKEWARM WATER (LOW PRESSURE) FOR AT LEAST 15 MINUTES, OC CASIONALLY LIFTING EYELIDS. GET MEDICALATTENTION. INGESTION: DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING TO AN

UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

Flash Point Method:TCC Flash Point:23.0F,-5.0C Lower Limits:1.00 % Upper Limits:11.00 % Extinguishing Media:FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG. Fire Fighting Procedures:FIREFIGHTING EQUIPMENT W/SCBA. H20 USED COOL CLOSED CONTAINERS PREVENT PRESSURE BUILDUP/AUTO IGNITION/EXPLOSION. DURING FIRE HDI VAPORS GENERATED BY COMBUSTION. Unusual Fire/Explosion Hazard:ISOL

ATE FROM ALL HEAT TYPES. CLOSED CONTAINERS EXPLODES EXPOSED TO EXTREME HEAT. DURING EMERGENCY CONDITIONS OVEREXPOSURE TO DECOMP.PRODUCTS CAUSE HEALTH HAZARD

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 Stora

Handling and Storage Precautions: BUILDINGS DESIGNED TO COMPLY W/OSHA 1910.106 AVOID STORING NEAR HIGH TEMPERATURES. STORE IN TIGHTLY CLOSED CONTAINERS. STORE IN WELL VENTILATED AREAS.
Other Precautions: PREVENT LEAKAGE. PREVENT BREATHING VAPORS, SPRAY MISTS. OVEREXPO CAUSE ALLERGIC REACTIONS. AVOID CONTACT WITH SKIN, & EYES. DON'T INGEST. DON'T HANDLE UNTIL THE MANUFACTURERS SAFETY PRECAUTIONS HAVE B EEN READ & UNDERSTOOD.

====== Exposure C ontrols/Personal Protection ==========

Respiratory Protection:OBSERVE OSHA REGULATIONS FOR RESPIRATOR USE. VENT AREA TO KEEP EXPOSURE LEVELS BELOW THE OSHA PERMISSIBLE LIMITS. AIR SUPPLIED RESPIRATOR IS RECOMMENDED. VAPOR PARTICULATE RESPIRATOR (TC23C NIOSH/MSHA) APPROPRIATE WHEN 10 TIMES BELOW LIMIT.

Ventilation:EXHAUST VENTILATION SUFFICIENT TO KEEP AIRBORNE CONCENTRATIONS OF SOLVENT, HDI & POLYISOCYANATES BELOW RESPECT TLV'S.

Protective Gloves:COTTON, NEOPRENE, R

UBBER, POLYETHYLENE

Eye Protection: CHEMICAL GOGGLES, FULL-FACE SHIELD

Other Protective Equipment: THE USE OF LONG SLEEVE & LONG LEG CLOTHING IS RECOMMENDED. REMOVE & WASH CONTAMINATED CLOTHING BEFORE REUSE.

Work Hygienic Practices: WASH HANDS BEFORE EATING, SMOKING, OR USING

WASHROOM. SMOKE IN DESIGNATED AREAS ONLY.

Supplemental Safety and Health KEY1;F5.

HCC:F5 Boiling Pt:B.P. Text:175 TO 338F Vapor Density:> AIR Spec Gravity:0.90156 Evaporation Rate & amp; Reference:3.24 X N-BUTYL ACETATE Solubility in Water:INSOLUBLE Appearance and Odor:AMBER LIQUID WITH SOLVENT ODOR Percent Volatiles by Volume:76.9

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 TEMPERA

TURES.

Hazardous Decomposition Products:BY HIGH HEAT/TEMPERATURE: CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN, TRACES OF HCN AND HDI.

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

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