Product ID:FA-1076 MSDS Date:09/28/1988 FSC:8040 NIIN:00-515-2250 MSDS Number: BJXMF === Responsible Party === Company Name: CLIFTON ADHESIVE, INC. Address: BURGESS PLACE City:WAYNE State:NJ ZIP:07474-0832 Country:US Info Phone Num:201-694-0845 Emergency Phone Num:201-694-0845 CAGE:79833 === Contractor Identification === **Company Name: CLIFTON ADHESIVE INC** Address:BURGESS PL В ox:City:WAYNE State:NJ ZIP:07470 Country:US Phone:201-694-0845; 973-694-0845 CAGE:79833

Ingred Name:METHYL ETHYL KETONE (2-BUTANONE) (MEK) (SARA III) CAS:78-93-3 RTECS #:EL6475000 Fraction by Wt: 65% Other REC Limits:NONE SPECIFIED OSHA PEL:200 PPM/300 STEL ACGIH TLV:200 PPM/300STEL 9192 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:TETRAHYDROFURAN (SARA III) CAS:109-99-9 RTECS #:LU5950000 Fraction by Wt: 49% Other REC Limits:NONE SPECIFIED OSHA PEL:200 PPM/250 STEL ACGIH TLV:200 PPM/250STEL;9192 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:METHYL ISOBUTYL KETONE (SARA III) CAS:108-10-1 RTECS #:SA9275000 Fraction by Wt: 4% 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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcino

genicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:MAY CAUSE LIVER AND KIDNEY DAMAGE. CAN DAMAGE NERVOUS SYSTEM. WEAKNESS IN HANDS AND FEET MAY OCCUR. MINOR EMBRYOTOXIC/FETOTOXIC EFFECTS HAVE BEEN OBSERVED IN LABORATORY RATS EXPOSED TO MEK BY INHALATI ON AT LEVELS GREATER THAN 1000 PPM (5 TIMES THE OSHA-PEL) FOR MOST OF THE GESTATION PERIOD.CAUSE NAUSEA AND/OR NARCOSIS.

Effects of Overexposure:IRRITATION TO EYES AND SKIN. CAN ALSO CAUSE SKIN DRYNESS. LIQU

ID INGESTION MAY RESULT IN VOMITING. CAN SEVERELY BURN EYES. MAY CAUSE VOMITING AND DIARRHEA.

Medical Cond Aggravated by Exposure:RESPIRATORY AILMENTS. MAY CAUSE INJURY TO LIVER AND KIDNEYS WHEN INGESTED OR INHALED AT HIGH CONCENTRATIONS.

First Aid:UTILIZE THE SUGGESTED METHODS BELOW. IN EMERGENCY SITUATION NOTIFY PHYSICIAN IMMEDIATELY. SKIN:WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION. EYES:FLUSH EYES ABUNDENTLY WITH CLEAN WATER AND REFER TO PHYSICIAN. INGESTION:DO NOT INDUCE VOMITING. REFER TO PHYSICIAN. EXCESSIVE INHALATION:REMOVE PATIENT TO FRESH AIR OR GIVE OXYGEN. USE CPR IF PATIENT IS NOT BREATHING. REFER TO PHYSICIAN.

Flash Point Method:OC Flash Point:4F/-15C Autoignition Temp: Autoignition Temp Text: 610F Lower Limits:1.4 Upper Limits:11.8 Extinguishing Media:CO2, FOAM, DRY CHEMICAL Fire Fighting Procedu res:NIOSH/MSHA-APPROVED SCBA SHOULD BE WORN. USE WATER SPRAY TO COOL FIRE EXPOSED STRUCTURES AND DISPERSE VAPOR CLOUD IF FIRE IS NOT PRESENT. Unusual Fire/Explosion Hazard: VAPOR IS HEAVIER THAN AIR AND MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASHBACK. Spill Release Procedures: ABSORB SPILL IN SAND, EARTH, VERMICULITE, OIL-DRI OR SOL-SPEED-DRI. SHOVEL ABSORBED MATERIAL INTO STEEL CONTAINER AND COVER. Handling and Storage Precautions: STORE IN APPROVED SOLVENT STORAGE AREA. KEEP TIGHTLY CLOSED. KEEP AWAY FROM HEAT, OPEN FLAMES, SPARKS, HOT SURFACES AND OXIDIZING AGENTS. Respiratory Protection: USE NIOSH-APPROVED ATMOSPHERE SUPPLYING OR AIR PURIFYING RESPIRATOR FOR ORGANIC VAPORS AS REQUIRED TO MAINTAIN EXPOSURE LEVELS BELOW RECOM MENDED LIMITS. Ventilation:LOCAL:REMOVE VAPORS DURING PROCESSING. MECHANICAL: EXPLOSION-PROOF EQUIP. SPECIAL: REDUCE VAPOR CONCENTRATIONS BELOW LIMITS Protective Gloves: USE PVA GLOVES Eye Protection:WEAR SAFETY GLASSES Other Protective Equipment: PROTECTIVE CLOTHING AS REQUIRED TO PREVENT SKIN CONTACT. Work Hygienic Practices: KEEP AREA CLEAN. CLEAN UP SPILLS IMMEDIATELY. PRACTICE GOOD PERSONAL HYGIENE. Supplemental Safety and Health ============= Physical/Chemical Properties

HCC:F3 Boiling Pt:B.P. Text:149F,65C Vapor Pres:71.3@20C Vapor Density:2.55 Spec Gravity:0.867 Appearance and Odor:LIGHT AMBER. SWEET PUNGENT ODOR

Stability Indicator/Materials to Avoid:YES
Stability Condition to Avoid:AVOID HEAT, OPEN FLAMES, SPARKS, HOT
SURFACES AND OXIDIZING AGENTS.
Hazardous Decomposition Products:OXIDES OF CARBON, NITROGEN ZINC, SULFUR, HYDROGEN CHLORIDE.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CHEMICAL AND SOLVENT WASTE DISPOSAL REGULATIONS.

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.