HILLSBORD, OR 97122

(20 SECON 81305)

FLO-KEM, INC.
1940Z SUSANA RD.
RANCHO DOMINGUEZ, CA 902Z1 \$\frac{1}{2} \text{C} \tex

MATERIAL SAFETY DATA SHEET ESSENTIALLY SIMILAR TO FORM OSHA 174

SECTION I- IDENTIFICATION OF PRODUCT

FURBISH LOW FOAM FL263

IDENTITY:

HSDS NUMBER: 263 DATE PREPARED: 1-1-90

REVISION: 3

HAZARO RATING:

4 = EXTREME 1 = SLIGHT

TOXICITY: 1 FIRE: 0

REACTIVITY: 0

/SPECIAL:

SECTION II. HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL

IDENTITY-COMMON NAME(S):

2-SUTOXYETHANGL

(ETHYLENE GLYCOL N-BUTYL ETHER)

CAS NUMBER: 111762

OSHA PEL: ZSPPH

ACGIH TLY: ZSPPM

OTHER LIMITS RECORMENDED:

% (OPTIDNAL): <5%

SODIUM HYDROXIDE, CAUSTIC SODA CAS NUMBER #1310-73-2 OSHA PEL: Z MG/M3 ACGIH TLY: 2 MG/M3 OTHER LIMITS RECOMMENDED:

% (OPTIONAL): 0.25%

ASECTION III. PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: -212 F
VAPOR PRESSURE (MM HG_): 877 F 23
VAPOR DENSITY (AIR = 1): <1
SOLUBILITY IN WATER: COMPLETE

SPECIFIC GRAVITY (HZO=1): 1.022 HELTING POINT: NA EVAPORATION RATE (BUTYL ACETATE = 1): <1 APPEARANCE: CLEAR BLUE GREEN LIQUID PH 8 77 F: 12.5

ODOR: MINT

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT(METHOD USED): NONE TO BOILING TCC
FLAMMABLE LIMITS: 2-BUTOXYETHANOL LEL: 1.1 UEL: 10.6

EXTINGUISHING MEDIA: USE ANY APPROPRIATE MEDIUM TO EXTINGUISH SURROUNDING FIRE

SPECIAL FIRE FIGHTING PROCEDURES: USE WATER TO COOL CONTAINERS IN FIRE AREA TO PREVENT RUPTURE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V. HEALTH HAZARD DATA

PRIMARY ROUTE(S) OF ENTRY: INHALATION? X EYES? SKIN? X INGESTION? (ACUTE) HEALTH HAZARDS:

EYES: CONTACT WITH EYES WILL CAUSE EYE IRRITATION.

SKIN: PROLONGED OR REPEATED CONTACT WITH SKIN WILL CAUSE SKIN IRRITATION.

INGESTION: SWALLOWING MAY CAUSE IRRITATION TO THE THROAT, MOUTH AND DIGESTIVE TRACT ACCOMPANIED BE NAUSEA AND VOMITING.

INHALATION: PROLONGED EXPOSURE TO VAPORS AND EXPOSURE TO MISTS AND SPRAY CAUSE CHEST DISCOMFORT AND COUGHING...

(CHRONIC) HEALTH HAZARDS:

Z-BUTOXYETHANOL IS READILY ABSORBED THROUGH THE SKIN. FREQUENT OR WIDE SPREAD CONTACT WITH IT HAY RESULT IN THE ABSORBTION OF HARMFUL AMOUNTS AND CAUSE DAMAGE TO THE LIVER, KIDNEYS, LUNGS AND RED BLOOD CELLS CAUSING BLOOD IN THE URINE. NO SUCH CASES HAVE BEEN REPORTED TO FLO-KEM IN THE 15 YEARS IT HAS BEE SELLING RMC CLEANER.

SIGNS AND SYMPTOMS OF EXPOSURE:

EYES: WATERING OF EYES, STINGING SENSATION.

SKIN: DRYNESS OF SKIN, CHAPPED MANDS, OVEREXPOSURE MAY LEAD TO DERMATITIS

INGESTION: NAUSEA, VOMITING, DIARRHEA

INHALATION: SPRAY OR MIST MAY CAUSE COUGHING AND SNEEZING AND DISCOMFORT OF THE CHEST.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
PERSONS WITH PRE-EXISTING DERMATITIS MAY BE HORE SUSCEPTIBLE TO THE EFFECTS C
THIS MATERIAL.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF IRRITATION OCCURS OR PERSONNEL OBTAIN HEDICAL ATTENTION.

SKIN: WASH OFF WITH WATER. IF IRRITATION OCCURS, OBTAIN MEDICAL ATTENTION.

'INGESTION: GIVE TWO GLASSES OF WATER. DO NOT INDUCE VONITING. HAVE MEDICAL PERSONNEL DETERMINE IF EVACUATION OF THE STOMACH IS NECESSARY. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

INHALATION: IF INHALED, REMOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IF RESPIRATORY IRRITATION OCCURS OR IF BREATHING BECOMES DIFFICULT.

SECTION VI. TOXICITY DATA

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

ORAL: 2-BUTOXYETHANOL LD50 (RAT) = 1480 MG/KG; (RABBIT) = 320 MG/KG

SODIUM HYDROXIDE LD50 (RAT 140-340 MG/KG

DERMAL: 2-BUTDXYETHANOL LDSG (RABBIT) = 490 MG/KG SODIUM HYDROXIDE LDSG (RABBIT) 1350 MG/KG

INHALATION: 2-BUTCXYETHANOL LC50 (MOUSE) = 700 PPM/7HJ (HUMAN) = 195 PPM/8H

SODIUM HYDROXIDE: ND

2-BUTOXYETHANOL OTHER DATA: INHALATION EXPOSURE OR PREGNANT RABBITS CAUSED SOME TOXICITY TO THE MOTHER AND FETUS AT 200PPM, BUT THERE WERE NO EFFECTS AT 100 PPM AND BELOW. INHALATION EXPOSUR TO PREGNANT RATS CAUSED SOME TOXICITY TO THE MOTHER AND FETUS AT 200 PPM AND 100 PPM, BUT THERE WERE NO EFFECTS AT 50 PPM AND BELOW THIS PRODUCT DID NOT CAUSE BIRTH DEFECTS IN EITHER STUDY.

JECTION VII. REACTIVITY DATA

STABILITY:

UNSTABLE:

CONDITIONS TO AVOID:

STABLE: X

INCOMPATIBILITY (RATERIALS TO AVOID): STRONG ACIDS, OXIDIZING MATERIALS

HAZARDS DECOMPOSITION OR BYPRODUCTS: MAY LIBERATE OXIDES OF CARBON. THERMAL DECOMPOSITION AND PHOSPHORUS.

HAZARDOUS POLYMERIZATION - HAY OCCUR:

WILL NOT OCCUR:

CONDITIONS TO AVOID:

SECTION VIII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: WEAR PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON CHEMICAL GOGGLES AND SELF CONTAINED BREATHING APPARATUS.

SHALL SPILLS: MOF OR HIPE UP AND DISPOSE OF IN DRAIN AS APPROPRIATE.

LARGE SPILLS: CONTAIN BY DIKING WITH SOIL OR OTHER ABSORBENT MATERIAL AND THE PUMP INTO DOT APPROVED WASTE CONTAINERS OR ABSORB WITH SORBENT MATERIAL AND PLACE THE RESIDUE IN DOT APPROVED WASTE CONTAINERS. KEEP OUT OF SEWERS, STOR DRAINS, SURFACE WATERS AND SOIL. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING.

NOTICE



ALL INFORMATION, RECOMMENDATIONS, AND SUGGESTIONS APPEARING HEREIN CONCERNING THIS PRODUCT ARE BASED UPON DATA OBTAINED FROM THE MANUFACTURER AND/CR RECOGNIZED TECHNICAL SOURCES; HOWEVER, FLO-KEH, INC. MAKES NO WARRANTY, REPRESENTATION OR GUARANTY AS TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE MATERIAL SET FORTH HEREIN. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SAFETY, TOXICITY AND SUITABILITY OF HIS OWN USE, HANDLING AND DISPOSAL OF THE PRODUCT. ADDITIONAL PRODUCT LITERATURE MAY BE AVAILABLE UPON REQUEST. SINCE ACTUAL USE BY OTHERS IS BEYOND OUR CONTROL, NO WARRANTY, EXPRESS OF IMPLIED, IS MADE BY FLO-KEM, INC. AS TO THE EFFECTS OF SUCH USE, THE RESULTS TO BE OBTAINED OR THE SAFETY AND TOXICITY OF THE PRODUCT, NOR DOES FLO-KEM, INC. ASSUME ANY LIABILITY ARISING OUT OF USE BY OTHERS OF THE PRODUCT.

NA - NOT APPLICABLE

S - MAY BE ABSORBED THROUGH INTACT SKIN

ND - NO DATA AVAILABLE