FIRE AND EXPLOSION HAZARD
DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT, FLAME, OR OXIDIZERS.
VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.
VAPOR-AIR MIXTURES ARE EXPLOSIVE.
FLASH POINT: 52 F (11 CI) (CC) UPPER EXPLOSIVE LIMIT: 36.0%
LOWER EXPLOSIVE LIMIT: 6.0% AUTOIGNITION TEMP: 725 F (385 C)
FLAMMABILITY CLASS(GOSHA): IB

FIREIGHTING MEDIA:
DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR ALCOHOL-RESISTANT FOAM (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).
FOR LARGER FIRES, USE WATER SPRAY, FOAM OR ALCOHOL-RESISTANT FOAM (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FIREIGHTING:
MOBILE CONTAINER FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK. DIKE FIRE-FIRE CONTROL WATER FOR LATER DISPOSAL. DO NOT SCATTER THE MATERIAL. APPLY COLD WATER TO SUFFICIENTLY CONTAIN THE INHERENT HAZARD OF THIS MATERIAL UNTIL WELL AFTER FIRE IS OUT. STAY AWAY FROM EDGES OF TANKS, CONTAINERS OR ANY DISCOLORATION OF TANK DUE TO FIRE. ISOLATE FOR 1/2 MILE IN ALL DIRECTIONS IF TANK, JAIL OR TANK TRUCK IS INVOLVED IN FIRE (1980 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5. GUIDE PAGE 28).

EXTINGUISH ONLY IF FLOW CAN BE STOPPED. USE WATER IN FLOODING AMOUNTS AS FOG. SOLID STREAMS MAY NOT BE EFFECTIVE. COOL CONTAINERS WITH FLOWING STREAMS OF WATER. APPLY FROM AS FAR A DISTANCE AS POSSIBLE. AVOID BREATHING TOXIC VAPORS. KEEPP UPWIND.

TRANSPORTATION DATA
DEPARTMENT OF TRANSPORTATION HAZARD CLASSIFICATION 49 CFR 172.101: FLAMMABLE LIQUID
DEPARTMENT OF TRANSPORTATION PACKAGING REQUIREMENTS: 49 CFR 173.119:
EXCEPTIONS: 49 CFR 173.118
EXCEPT FOR EXPLOSIVES, INHALATION HAZARDS, AND INFECTION SUBSTANCES, THE EFFECTIVE DATE FOR HAZARD COMMUNICATION REQUIREMENTS IS EXTENDED TO OCTOBER 1, 1992. HM-1750, HM-1755, 04/26/91.
U.S. DEPARTMENT OF TRANSPORTATION SHIPPING NAME-ID NUMBER, 49 CFR 172.101:
METHYL ALCOHOL-UN 1230
U.S. DEPARTMENT OF TRANSPORTATION HAZARD CLASS OR DIVISION, 49 CFR 172.101: 3 FLAMMABLE LIQUID
U.S. DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS, 49 CFR 172.101:
FLAMMABLE LIQUID, POISON
U.S. DEPARTMENT OF TRANSPORTATION PACKAGING AUTHORIZATIONS:
EXCEPTIONS: NONE
BULK PACKAGING, 49 CFR 173.202
BULK PACKAGING, 49 CFR 173.242
U.S. DEPARTMENT OF TRANSPORTATION QUANTITY LIMITATIONS 49 CFR 172.101:
CARGO AIRCRAFT OR RAILCARR. 1 L
PASSenger AIRCRAFT OR RAILCARR. 60 L

TOXICITY
METHYL ALCOHOL (METHANOL):
IRITATION DATA: 20 MG/24 HOURS SKIN-RABBIT MODERATE; 40 MG EYE-RABBIT MODERATE; 100 MG/24 HOURS EYE-RABBIT MODERATE.

HEALTH EFFECTS AND FIRST AID

INHALATION:
METHYL ALCOHOL (METHANOL).
NARCOTIC/NEUROTOXIC; IMMEDIATE AND DANGEROUS TO LIFE AND HEALTH.
ACUTE EXPOSURE: CAN CAUSE IRRITATION TO THE MUCOUS MEMBRANES, COUGHING, OPHTHALMOSCOPY, NEUROTOXICITY, GASTRIC IRRITATION, VOMITING, DIARRHEA, GASTRITIS, CEREBRAL PALLIDODERMA, SNEEZING, NAUSEA, CONJUNCTIVITIS, DYSPEPSIA, ASTHMA, AND ANOREXIA.
CHRONIC EXPOSURE: REPEATED OR PROLONGED EXPOSURE MAY CAUSE CESSATION OF ANNUAL EXPOSURE TO CAUSE TREATMENT OF THE MUCOUS MEMBRANES, COUGHING, OPHTHALMOSCOPY, NEUROTOXICITY, GASTRIC IRRITATION, VOMITING, DIARRHEA, GASTRITIS, CEREBRAL PALLIDODERMA, SNEEZING, NAUSEA, CONJUNCTIVITIS, DYSPEPSIA, ASTHMA, AND ANOREXIA.

FIRST AID - REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN CONTACT:
METHYL ALCOHOL (METHANOL).
IRRITANT, NARCOTIC, NEUROTOXIC.
ACUTE EXPOSURE: WITH LIQUID MAY CAUSE IRRITATION, SKIN ABSORPTION OF CARCINOGENIC METABOLIC ACIDS AND EFFECTS ON THE EYES AND CENTRAL NERVOUS SYSTEM MAY OCCUR AS DETAILED IN ACUTE INGESTION.
CHRONIC EXPOSURE: REPEATED OR PROLONGED EXPOSURE TO LIQUID MAY CAUSE DETERIORATION OF THE SKIN RESULTING IN ERYTHEMA, SCALING, AND ECzematosus DERMATITIS. DERMATOLOGIC ABSORPTION MAY RESULT IN METABOLIC ACIDS AND EFFECTS AS DETAILED IN ACUTE INGESTION.

FIRST AID - REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREAS WITH LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15 - 20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT:
METHYL ALCOHOL (METHANOL).
IRRITANT.
ACUTE EXPOSURE: VAPORS MAY CAUSE IRRITATION. HIGH CONCENTRATIONS HAVE BEEN REPORTED TO CAUSE MILD INFLAMMATION OF THE CONJUNCTIVA AND EYELID DEFECTS ON THE CORNEA. MILD IRRITATION MAY OCCUR WITH DILUTION OF THE UNABSORBED LIQUID HAS PRODUCED METABOLIC ACIDOPHILY AND CONJUNCTIVAL REDNESS IN RABBITS. APPLICATION OF A DROP OF 0.1% W/V SODIUM CARBOXYLIC REACTION, GRADED 3 ON A SCALE OF 1 - 10 AFTER 24 HOURS.
CHRONIC EXPOSURE: REPEATED OR PROLONGED CONTACT MAY CAUSE CONJUNCTIVITIS.

OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE.

HEART, STOMACH, INTESTINAL AND PANCREATIC DAMAGE MAY ALSO OCCUR. DEATH MAY OCCUR BY RESPIRATORY FAILURE OR RARELY FROM CIRCULATORY COLLAPSE. AT 1 - 1.5 MG/L, ANTERIOR SEIZURES OR TETANIC SPASM, AND HYPOTENSION, APPARENTLY DUE TO MITRICAL CONSTRICTION OF THE VISUAL SYSTEM AND TRANSIENT OR PERMANENT BLINNESS MAY OCCUR. BILATERAL SERRONERIAL DEAFNESS HAS BEEN REPORTED IN A SINGLE CASE. LIVER, KIDNEY, AND LUNG HISTOPATHOLOGICAL CHANGES WERE OBSERVED.

ORAL OR INTRAVENOUS ADMINISTRATION OF 6-METHYLPYRAZOLE INHIBITS ALCOHOL DEHYDROGENASE AND HAS BEEN USED EFFECTIVELY AS AN ANTIDOTE FOR METHANOL OR ETHYLENE GLYCOL POISONING (ELLENHORN AND BARDELLOX, MEDICAL TOXICOLOGY).
**STORAGE**

STORE IN ACCORDANCE WITH 29 CFR 1910.106.
STORE AWAY FROM INCOMPATIBLE SUBSTANCES.

**DISPOSAL**

DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 40 CFR 262. EPA HAZARDOUS WASTE NUMBER U154.

**CONDITIONS TO AVOID**

AVOID CONTACT WITH HEAT, SPARKS, FLAMES OR OTHER IGNITION SOURCES. VAPORS MAY BE EXPLOSIVE. MILK OR WASH WATER IS POISONOUS; AVOID INHALATION OF VAPORS OR CONTACT WITH SKIN. DO NOT ALLOW MATERIAL TO CONTAMINATE WATER SOURCES.

**SPILL AND LEAK PROCEDURES**

SOIL SPILL:
DIG HOLDING AREA SUCH AS LAGOON, POND OR PIT FOR CONTAINMENT.
DIKE FLOW OF SPILLED MATERIAL USING SOIL OR SAND BAGS OR FOAMED BARRIERS SUCH AS POLYURETHANE OR CONCRETE.

WATER SPILL:
APPLY WATER SPRAY TO KNOCK DOWN VAPORS.

LIMIT SPILL MOTION AND DISPERSION WITH NATURAL BARRIERS OR OIL SPILL CONTROL BOOMS.

USE SUCTION HOSES TO REMOVE TRAPPED SPILL MATERIAL.

**OCCUPATIONAL SPILL**

SHUT OFF IGNITION SOURCES, DO NOT TOUCH SPILLED MATERIAL, LEAK, STOP LEAK, IF YOU CAN DO IT WITHOUT RISK. USE WATER SPRAY TO REDUCE VAPORS FOR SMALL SPILLS; TAKE UP WITH SAND OR OTHER ABSORBENT MATERIAL AND PLACE INTO CONTAINERS FOR LATER DISPOSAL. FOR LARGER SPILLS, DIKE FAR AHEAD OF SPILL FOR LATER DISPOSAL. NO SMOKING, FLAMES OR FLARES IN HAZARD AREA KEEP UNNECESSARY PEOPLE AWAY; ISOLATE HAZARD AREA AND DENY ENTRY.

REPORTABLE QUANTITY (RQ): 5000 POUNDS.


**PROTECTIVE EQUIPMENT**

VENTILATION:
PROVIDE GENERAL DILUTION VENTILATION TO MEET PUBLISHED EXPOSURE LIMITS.
VENTILATION EQUIPMENT MUST BE EXPLOSION-PROOF.

RESPIRATOR:


METHYL ALCOHOL (METHANOL):

2000 PPM - ANY SUPPLIED-AIR RESPIRATOR.
5000 PPM - ANY SELF-CONTAINED BREATHING APPARATUS.
10,000 PPM - ANY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE.
25,000 PPM - ANY SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE.
25,000 PPM - ANY SUPPLIED-AIR RESPIRATOR WITH A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-Demand OR OTHER POSITIVE PRESSURE MODE.