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XYLENE
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MATERIAL SAFETY DATA SHEET

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CHEMICAL DIVISION
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SUBSTANCE IDENTIFICATION

SUBSTANCE: **XYLENE** CAS-NUMBER 1330-20-7

TRADE NAMES/SYNONYMS:
BENZENE, DIMETHYL-; DILAN; DIMETHYLBENZENE; XYLOL; RCRA U239; STCC 4809350;
UN 1307; X35; X4; X5; X16; X55; CBH10; ACC25150

CHEMICAL FAMILY:
HYDROCARBON, AROMATIC

MOLECULAR FORMULA: C6-H4-(C-H)2

MOLECULAR WEIGHT: 106.16

CERCA RATINGS (SCALE 0-3): HEALTH=2 FIRE=3 REACTIVITY=0 PERSISTENCE=1
NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=3 REACTIVITY=0

COMPONENTS AND CONTAMINANTS

COMPONENT: XYLENE (O-, M-, P-ISOMERS) PERCENT: 83.0
CAS# 1330-20-7

COMPONENT: ETHYL BENZENE PERCENT: 17.0
CAS# 100-41-4

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITS:

XYLENE:
100 PPM (434 MG/M3) OSHA TWA, 150 PPM (651 MG/M3) OSHA STEL
100 PPM (434 MG/M3) ACGIH TWA, 150 PPM (651 MG/M3) ACGIH STEL
100 PPM (434 MG/M3) NIOSH RECOMMENDED TWA
150 PPM (651 MG/M3) NIOSH RECOMMENDED STEL
200 PPM (868 MG/M3) DEQ MAK 30 MINUTE PEAK, AVERAGE VALUE, 4 TIMES/SHIFT

MEASUREMENT METHOD: CHARCOAL TUBE, CARBON DISULFIDE, GAS CHROMATOGRAPHY WITH
FLAME IONIZATION DETECTION. (NIOSH VOL. III # 1501, AROMATIC HYDROCARBONS).

1000 POUNDS CERCA SECTION 103 REPORTABLE QUANTITY
SUBJECT TO SARA SECTION 313 ANNUAL TOXIC CHEMICAL RELEASE REPORTING

ETHYL BENZENE:

100 PPM (434 MG/M3) OSHA TWA, 125 PPM (543 MG/M3) OSHA STEL
100 PPM (434 MG/M3) ACGIH TWA, 125 PPM (543 MG/M3) ACGIH STEL
100 PPM (434 MG/M3) NIOSH RECOMMENDED TWA
125 PPM (543 MG/M3) NIOSH RECOMMENDED STEL
100 PPM (434 MG/M3) DEQ MAK 30 MINUTE PEAK, AVERAGE VALUE, 8 TIMES/SHIFT
200 PPM (868 MG/M3) DEQ MAK 5 MINUTE PEAK, MOMENTARY VALUE, 8 TIMES/SHIFT

MEASUREMENT METHOD: CHARCOAL TUBE, CARBON DISULFIDE, GAS CHROMATOGRAPHY WITH
FLAME IONIZATION DETECTION. (NIOSH VOL. III # 1501, AROMATIC HYDROCARBONS).

1000 POUNDS CERCA SECTION 103 REPORTABLE QUANTITY
SUBJECT TO SARA SECTION 313 ANNUAL TOXIC CHEMICAL RELEASE REPORTING

**OSHA LIMITS ADOPTED JANUARY 19, 1988 ARE SUBJECT TO THE DECISION OF THE
11TH CIRCUIT COURT OF APPEALS (AFL-CIO V. OSHA) AS OF JULY 7, 1992.**

PHYSICAL DATA

DESCRIPTION: LIGHT COLORED OR COLORLESS MOBILE LIQUID WITH AN AROMATIC ODOR.
BOILING POINT: 279-284 F (137-140 C) SPECIFIC GRAVITY: 0.86
VOLATILITY: 100% VAPOR PRESSURE: 6 MMHG @ 20 C

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EVAPORATION RATE: (BUTYL ACETATE = 1) 0.6 SOLUBILITY IN WATER: 0.00003%
ODOR THRESHOLD: 0.3 PPM VAPOR DENSITY: 3.7

SOLVENT SOLUBILITY: SOLUBLE IN ALCOHOL, ETHER, MANY ORGANIC SOLVENTS

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:
DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

VAPOR-AIR MIXTURES ARE EXPLOSIVE ABOVE FLASH POINT.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE
OF IGNITION AND FLASH BACK.

DUE TO LOW ELECTROCONDUCTIVITY OF THE SUBSTANCE, FLOW OR AGITATION MAY
GENERATE ELECTROSTATIC CHARGES RESULTING IN SPARKS WITH POSSIBLE IGNITION.

FLASH POINT: 81-90 F (27-32 C) (CC) UPPER EXPLOSIVE LIMIT: 7.0%

LOWER EXPLOSIVE LIMIT: 1.0% AUTOIGNITION TEMP: 867-984 F (464-529 C)

FLAMMABILITY CLASS(OSHA), IC

FIREFIGHTING MEDIA:
DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR REGULAR FOAM

(1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR FOAM
(1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5).

FIREFIGHTING:

MOVE CONTAINER FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK. APPLY COOLING
WATER TO SIDES OF CONTAINERS THAT ARE EXPOSED TO FLAMES UNTIL WELL AFTER FIRE
IS OUT. STAY AWAY FROM ENDS OF TANKS. FOR MASSIVE FIRE IN CARGO AREA, USE
UNMANNED HOSE HOLDER OR MONITOR NOZZLES. IF THIS IS IMPOSSIBLE, WITHDRAW FROM
AREA AND LET FIRE BURN, WITHDRAW IMMEDIATELY IN CASE OF RISING SOUND FROM
VENTING SAFETY DEVICE OR ANY DISCOLORATION OF TANK DUE TO FIRE. ISOLATE FOR
1/2 MILE IN ALL DIRECTIONS IF TANK, RAIL CAR OR TANK TRUCK IS INVOLVED IN FIRE
(1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5, GUIDE PAGE 27).

EXTINGUISH ONLY IF FLOW CAN BE STOPPED. USE WATER IN FLOODING AMOUNTS AS FOG,
SOLID STREAMS MAY SPREAD FIRE. COOL CONTAINERS WITH FLOODING QUANTITIES OF
WATER, APPLY FROM AS FAR A DISTANCE AS POSSIBLE. AVOID BREATHING TOXIC VAPORS.
KEEP UPWIND.

WATER MAY BE INEFFECTIVE (NFPA 325M, FIRE HAZARD PROPERTIES OF FLAMMABLE
LIQUIDS, GASES, AND VOLATILE SOLIDS, 1991)

TRANSPORTATION DATA

DEPARTMENT OF TRANSPORTATION HAZARD CLASSIFICATION 49 CFR 172.101:
FLAMMABLE LIQUID

DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS 49 CFR 172.101 AND
SUBPART E:
FLAMMABLE LIQUID

DEPARTMENT OF TRANSPORTATION PACKAGING REQUIREMENTS: 49 CFR 173.119
EXCEPTIONS: 49 CFR 173.118

FINAL RULE ON HAZARDOUS MATERIALS REGULATIONS (HMR, 49 CFR PARTS 171-180),
DOCKET NUMBERS HM-181, HM-181A, HM-181B, HM-181C, HM-181D AND HM-204,
EFFECTIVE DATE OCTOBER 1, 1991. HOWEVER, COMPLIANCE WITH THE REGULATIONS IS
AUTHORIZED ON AND AFTER JANUARY 1, 1991. (55 FR 52402, 12/21/90)

EXCEPT FOR EXPLOSIVES, INHALATION HAZARDS, AND INFECTIOUS SUBSTANCES, THE
EFFECTIVE DATE FOR HAZARD COMMUNICATION REQUIREMENTS IS EXTENDED TO
OCTOBER 1, 1993. (56 FR 47158, 09/18/91)

U.S. DEPARTMENT OF TRANSPORTATION SHIPPING NAME: ID NUMBER, 49 CFR 172.101:
XYLENES-UN 1307

U.S. DEPARTMENT OF TRANSPORTATION HAZARD CLASS OR DIVISION, 49 CFR 172.101:
3 - FLAMMABLE LIQUID

U.S. DEPARTMENT OF TRANSPORTATION PACKING GROUP, 49 CFR 172.101:
PG. II

U.S. DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS, 49 CFR 172.101
AND SUBPART E:
FLAMMABLE LIQUID

U.S. DEPARTMENT OF TRANSPORTATION PACKAGING AUTHORIZATIONS:
EXCEPTIONS: 49 CFR 173.150
NON-BULK PACKAGING: 49 CFR 173.202

BULK PACKAGING: 49 CFR 173.242
U.S. DEPARTMENT OF TRANSPORTATION QUANTITY LIMITATIONS 49 CFR 172.101:
PASSENGER AIRCRAFT OR RAILCAR: 5 L
CARO AIRCRAFT ONLY: 80 L

TOXICITY

XYLENE:
IRRITATION DATA: 200 PPM EYE-HUMAN; 87 MG EYE-RABBIT MILD; 5 MG/24 HOURS
EYE-RABBIT SEVERE; 100% SKIN-RABBIT MODERATE; 500 MG/24 HOURS SKIN-RABBIT
MODERATE.

TOXICITY DATA: 10000 PPM/6 HOURS INHALATION-HUMAN LC50; 200 PPM INHALATION-HUMAN
LC50; 5000 PPM/4 HOURS INHALATION-RAT LC50; 450 PPM INHALATION-GUINEA PIG
LC50; 50 MG/KG ORAL-HUMAN LD50; 4300 MG/KG ORAL-RAT LD50; 1700 MG/KG
SUBCUTANEOUS-RAT LD50; 129 MG/KG INTRAVENOUS-RABBIT LD50; 2 MG/KG
INTRAPERITONEAL-MAMMAL LD50; 2459 MG/KG INTRAPERITONEAL-RAT LD50; 1548 MG/KG
INTRAPERITONEAL-MOUSE LD50; 2000 MG/KG INTRAPERITONEAL-GUINEA PIG LD50.
REPRODUCTIVE EFFECTS DATA: (RTECS), (DPND), (BIFAL), (38MAD).
CARCINOGEN STATUS: HUMAN INADEQUATE EVIDENCE; ANIMAL INADEQUATE EVIDENCE.
LOCAL EFFECTS: IRRITANT- INHALATION, SKIN, EYE.
ACUTE TOXICITY LEVEL: MODERATELY TOXIC BY INHALATION, INGESTION
TARGET EFFECTS: CENTRAL NERVOUS SYSTEM DEPRESSANT. POISONING MAY ALSO AFFECT
THE NERVOUS SYSTEM, LIVER AND KIDNEYS.
AT INCREASED RISK FROM EXPOSURE: PREGNANT WOMEN.
ADDITIONAL DATA: ALCOHOL MAY ENHANCE THE TOXIC EFFECTS. STIMULANTS SUCH
AS EPINEPHRINE OR EPHEDRINE MAY INDUCE VENTRICULAR FIBRILLATION.

ETHYL BENZENE:
IRRITATION DATA: 15 MG/24 HOURS OPEN SKIN-RABBIT MILD; 500 MG EYE-RABBIT
SEVERE.

TOXICITY DATA: 100 PPM/8 HOURS INHALATION-HUMAN LC50; 4000 PPM/4 HOURS
INHALATION-RAT LC50; 50 GM/M³/2 HOURS INHALATION-MOUSE LD50; 10000 PPM
INHALATION-GUINEA PIG LC50; 17800 MG/KG SKIN-RABBIT LD50; 3500 MG/KG
ORAL-RAT LD50; 2272 MG/KG INTRAPERITONEAL-MOUSE LD50. MUTAGENIC DATA
(RTECS). REPRODUCTIVE EFFECTS DATA (RTECS).

CARCINOGEN STATUS: NONE
LOCAL EFFECTS: IRRITANT- INHALATION, SKIN, EYES.
ACUTE TOXICITY LEVEL: MODERATELY TOXIC BY INGESTION; SLIGHTLY TOXIC BY DERMAL
TARGET EFFECTS: CENTRAL NERVOUS SYSTEM DEPRESSANT; POISONING MAY AFFECT THE
LIVER.
AT INCREASED RISK FROM EXPOSURE: PERSONS WITH PRE-EXISTING SKIN DISORDERS OR
IMPAIRED PULMONARY, RENAL, OR LIVER FUNCTION.
ADDITIONAL DATA: MAY CROSS THE PLACENTA. ETHYL BENZENE EXPOSED TO
PHOTO-OXIDATION IN THE PRESENCE OF OZONE AND NITROGEN DIOXIDE, AS IN THE
FORMATION OF SMOG. YIELDS PRODUCTS HAVING CONSIDERABLE IRRITANCY TO THE
HUMAN EYE.

HEALTH EFFECTS AND FIRST AID

INHALATION:

XYLENE:
ACUTE EXPOSURE: IRRITANT- 1000 PPM IMMEDIATELY DANGEROUS TO LIFE OR HEALTH.

ACUTE EXPOSURE OF THE UPPER RESPIRATORY TRACT MAY OCCUR AT 200
PPM EXPOSURE TO HIGHER CONCENTRATIONS MAY CAUSE MORE SEVERE IRRITATION
AND INITIAL CENTRAL NERVOUS SYSTEM EXCITATION FOLLOWED BY DEPRESSION.
SIGNS AND SYMPTOMS MAY INCLUDE RESPIRATORY DIFFICULTY AND SUBSTANTIAL PAIN,
TRANSIENT EUPHORIA AND EMOTIONAL LABILITY, HEADACHE, NAUSEA, VOMITING,
ANOREXIA, ABDOMINAL PAIN, DIZZINESS, DROWSINESS, ATAXIA, AND STAGGERING.
TINNITUS, TREMORS, CONFUSION, AND FLUSHING OF THE FACE AND A FEELING OF
INCREASED BODY HEAT. IN SEVERE EXPOSURES, THERE MAY BE STUPOR, ANESTHESIA,
UNCONSCIOUSNESS, AND COMA WHICH MAY BE PUNCTUATED BY EPISODES OF
NEUROIRRITABILITY, BUT RARELY FRANK CONVULSIONS, EXCEPT IN TERMINAL
ASPHYXIA. LIVER AND KIDNEY DAMAGE MAY OCCUR, BUT ARE USUALLY MILD AND
TRANSIENT. A GROUP OF SUBJECTS WHO INHALED 12.3 UMOL/L OF XYLENE
WHILE EXERCISING BECAME SIGNIFICANTLY IMPAIRED ON 3 NEUROPSYCHOLOGICAL
TESTS. EXPOSURE OF 3 PAINTERS TO APPROXIMATELY 10,000 PPM FOR 18.5
HOURS RESULTED IN DEATH FROM PULMONARY EDEMA AND RETICULAR BRAN
EXPERIENCED PULMONARY EDEMA, HYPOXEMIA, AND LUNG COAGULATION. RENAL
AND HEPATIC IMPAIRMENT ALSO DEVELOPED. COMPLETE RECOVERY TOOK 15 DAYS.
HIGH CONCENTRATIONS MAY CAUSE DEATH FROM SUDDEN VENTRICULAR FIBRILLATION,
BUT MORE FREQUENTLY DEATH OCCURS FROM RESPIRATORY ARREST.

CHRONIC EXPOSURE: REPEATED OR PROLONGED INHALATION OF VAPORS ABOVE 200 PPM
MAY CAUSE NAUSEA, VOMITING, ABDOMINAL PAIN, AND ANOREXIA. OTHER COMMON
COMPLAINTS INCLUDE HEADACHE, FATIGUE, LASSITUDE, IRRITABILITY, BREATHING
DIFFICULTIES, AND FLATULENCE. EFFECTS ON THE NERVOUS SYSTEM MAY RESULT IN
EXCITATION, FOLLOWED BY DEPRESSION, PARASTHESIAS, TREMORS, APPREHENSION,
IMPAIRED MEMORY, INSOMNIA, VERTIGO, AND TINNITUS. EFFECTS ON REACTION
TIME, MANUAL COORDINATION, BODY BALANCE AND EEG OCCURRED WITH REPEATED
EXPOSURE TO 80 PPM OF M-XYLENE SWEETISH TASTE IN THE MOUTH, DRY NOSE AND
THROAT, STRONG THIRST, MUCOSAL HEMORRHAGE, AND ANEMIA HAVE BEEN REPORTED.
EFFECTS ON THE REPRODUCTIVE SYSTEM, INCLUDING TESTICULAR ATROPHY, HYPOTESTO-
ADENAL HYPOGONADISM, AND REDUCED FERTILITY, HAVE BEEN OBSERVED IN MICE
EXPOSED TO 1150 PPM FOR 40-55 DAYS. RESULTED IN A REVERSIBLE DECREASE IN

THE RED AND WHITE CELL COUNTS AND AN INCREASE IN THE PLATELETS. ONE CASE
OF AN APPARENT EPILEPTIFORM SEIZURE FOLLOWING A RELATIVELY BRIEF EXPOSURE
HAS OCCURRED. WOMEN MAY DEVELOP MENSTRUAL DISORDERS, SUCH AS MENORRHAGIA
OR METRORRAGIA, INFERTILITY, AND PATHOLOGICAL PREGNANCY CONDITIONS
INCLUDING TOXICOSIS, DANGER OF MISCARRIAGE, AND HEMORRHAGING DURING
DELIVERY. REPEATED EXPOSURE OF PREGNANT MICE, RATS AND RABBITS TO THE
VAPORS OF XYLENE RESULTED IN FETAL DEATHS AND MALFOMATIONS. EFFECTS AND
ABNORMALITIES INCLUDED ANOMALY OF THE EMBRYO, CRANIOFACIAL AND
MUSCULOSKELETAL ABNORMALITIES, AND EXTRA EMBRYONIC STRUCTURES.

ETHYL BENZENE:

IRRITANT/ACUTIC: 2000 PPM IMMEDIATELY DANGEROUS TO LIFE AND HEALTH.
ACUTE EXPOSURE: MAY CAUSE SEVERE IRRITATION OF THE NOSE AND THROAT. ODOR IS
CONSIDERED AN ADEQUATE WARNING PROPERTY AT LEVELS BELOW SYSTEMIC TOXICITY.
AT HIGHER CONCENTRATIONS COUGH, FATIGUE, DEPRESSION, VERTIGO OR DIZZINESS,
DYSPNEA, SENSE OF CHEST CONSTRICTION, HEADACHE, NARCOSIS, AND COMA
MAY OCCUR. DEATH IS POSSIBLE FROM RESPIRATORY CENTER PARALYSIS.
EXPOSED ANIMALS EXHIBITED SIMILAR SYMPTOMS, AS WELL AS TREMOR OF THE
EXTREMITIES, STYCLIC AND MOTOR ATAXIA, STAGGERING GAIT, AND LOSS OF
RIGHTING REFLEX. LOSS OF CONSCIOUSNESS WAS FOLLOWED BY DEATH FROM
RESPIRATORY ARREST. EXPOSURE OF RATS TO VAPORS OF ETHYL BENZENE AND CONGESTION OF THE
BRONCHI AND LUNGS, GENERALIZED CYCLOTROPY, TREMOR, EYE IRRITATION AND
THE RENAL TUBULES AND HEPATIC DYSTROPHY. EFFECTS AT LEVELS BELOW SYSTEMIC TOXICITY
CONSIDERED ADEQUATE WARNING PROPERTIES AT LEVELS BELOW SYSTEMIC TOXICITY.
CHRONIC EXPOSURE: MAY CAUSE IRRITATION OF THE UPPER RESPIRATORY TRACT,
FATIGUE, SLEEPINESS, HEADACHE, IRRITABILITY, AND FUNCTIONAL NERVOUS
DISORDERS. CHRONIC INHALATION EXPOSURE IN ANIMALS HAS CAUSED UPPER
RESPIRATORY INFLAMMATION, NERVOUS SYSTEM DISORDERS, DYSTROPHIC CHANGES
IN THE LIVER AND KIDNEYS INCLUDING TOXIC HEPATITIS, CHANGES IN BLOOD
CHOLINESTERASE ACTIVITY, LEUKOCYTOSIS, AND RETICULOCYTOSIS. TESTICULAR
HISTOPATHOLOGY WAS OBSERVED IN RABBITS AND MONKEYS. REPRODUCTIVE
EFFECTS HAVE BEEN REPORTED IN ANIMALS. IN ONE CASE PREGNANT RATS EXPOSED
TO 100 OR 1000 PPM FOR 6 HOURS/DAY ON DAYS 1 TO 19 OF GESTATION HAD
OFFSPRING WITH A SIGNIFICANT INCREASE IN EXTRA RIB FORMATION.

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:

XYLENE:

ACUTE EXPOSURE: LIQUID XYLENE IS A DEFAATTING AGENT AND MAY CAUSE A BURNING
SENSATION, DRYING, VASODILATION, ERYTHEMA, AND POSSIBLY BLISTERING. THE
LIQUID IS READILY ABSORBED THROUGH INTACT OR BROKEN SKIN AT A RATE OF
APPROXIMATELY 4-10 MG/CM²/HOUR, BUT SYSTEMIC EFFECTS HAVE NOT BEEN
REPORTED.

CHRONIC EXPOSURE: REPEATED OR PROLONGED CONTACT MAY CAUSE DEFAATTING OF THE
SKIN WITH DRYING, ERYTHEMA, CRACKING, THICKENING AND BLISTERING. REPEATED
APPLICATION OF 95% XYLENE TO RABBIT SKIN CAUSED MODERATE TO MARKED
IRRITATION WITH ERYTHEMA AND MODERATE NECROSIS. ONE CASE OF ALLERGIC
CONTACT URTICARIA HAS BEEN REPORTED.

ETHYL BENZENE:

IRRITANT/ACUTIC:

ACUTE EXPOSURE: LIQUID OR VAPOR MAY DEPENDING ON CONCENTRATION AND LENGTH
OF EXPOSURE, CAUSE IRRITATION, INFLAMMATION AND POSSIBLY BURNS OF VARIOUS
DEGREE BURNS. ETHYL BENZENE WAS ABSORBED AT A RATE OF 22-33 MG/CM²/HOUR
ON THE HAND AND FOREARM OF HUMAN SUBJECTS AND COULD POSSIBLY CAUSE
SYSTEMIC TOXICITY AS IN INHALATION, CONTACT WITH RABBIT SKIN BY THE
LIQUID CAUSED ERYTHEMA, EXFOLIATION AND VESICULATION.
CHRONIC EXPOSURE: REPEATED OR PROLONGED EXPOSURE MAY CAUSE RASH OR
DERMATITIS BY DEFAATTING THE SKIN. ADMINISTRATION TO RABBITS CAUSED EFFECTS
RANGING FROM REDDING AND MODERATE IRRITATION TO SLIGHT NECROSIS,
EXFOLIATION, AND BLISTERING.

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

EYE CONTACT:

XYLENE:

ACUTE EXPOSURE: 200 PPM HAS CAUSED CONJUNCTIVAL IRRITATION IN HUMANS. AT
HIGHER CONCENTRATIONS, IRRITATION MAY BE SEVERE. VAPOR EXPOSURE HAS ALSO
CAUSED TEARING AND PHOTOPHOBIA. AN ACCIDENTAL SPLASH IN THE HUMAN EYE
CAUSED TRANSIENT SUPERFICIAL DAMAGE WITH RAPID RECOVERY, ALTHOUGH
REVERSIBLE CORNEAL BURNS HAVE ALSO BEEN REPORTED.
CHRONIC EXPOSURE: REPEATED OR PROLONGED EXPOSURE TO HIGH VAPOR
CONCENTRATIONS MAY CAUSE A BURNING SENSATION, CONJUNCTIVITIS AND BLURRED
VISION. REVERSIBLE VASCULAR, EPITHELIAL KERATOPATHY HAS BEEN REPORTED IN
SOME WORKERS.

ETHYL BENZENE:

IRRITANT/ACUTIC: CAN CAUSE IRRITATION AT LEVELS OF 200 PPM WHICH USUALLY

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CONDUCTIVITY, WHICH
RED IN CONTAINERS
SPECIFIED IN NFPA 77-198

STORAGE IS PREFERRED
LIQUIDS STORAGE ROOM.
HAZARDOUS CHEMICALS

CABLE TO GENERATORS
NUMBER U239.

SOURCES OF IGNITION. VANDERBILT CONTAINERS MAY VIOLATE FEDERAL SOURCES.

CONTAIN SPILL AND DIK
POLYURETHANE OR FO
POWDER.

AS OR OIL SPILL CONTR

ACTIVE AGENT.

WILL AND INCREASE

APPLY ACTIVATED CARBON

MASSSES OF POLLUTION

WITHOUT RISK. USE WA
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FOR LARGER SPILLS, I
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SARA) SECTION 304 RELEASABLE QUANTITY FOR THIS FACILITY PLANNING COMM. (355.40). IF THE RELEASED THE NATIONAL RESPONSE R (202) 426-2675 IN TH

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ATIONS ARE RECOMMENDED
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THE SPECIFIC RESPIRATOR SELECTED MUST BE BASED ON CONTAMINATION LEVELS FOUND IN THE WORK AREA. MUST EXCEED THE WORKING LIMITS OF THE RESPIRATOR AND BE PROVED BY THE MANUFACTURER'S DATA. MUST BE APPROVED BY THE SAFETY AND HEALTH AND THE MINE SAFETY AND HEALTH ADMINISTRATION (MOSH-MSHA).

XYLENE (O - M - AND P - ISOMERS):
1000 PPM - ANY CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE(S).

ANY POWERED AIR-PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE(S).
ANY SELF-CONTAINED BREATHING APPARATUS

ESCAPE - ANY AIR-PURIFYING FULL FACEPIECE RESPIRATOR (GAS MASK) WITH A CHIN-STYLE OR FRONT - OR BACK-MOUNTED ORGANIC VAPOR CANISTER.
ANY APPROPRIATE ESCAPE-TYPE SELF-CONTAINED BREATHING APPARATUS.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:
ANY SELF-CONTAINED BREATHING APPARATUS THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

ANY SUPPLIED-AIR RESPIRATOR THAT HAS A FULL FACEPIECE AND IS OPERATED IN A PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE IN COMBINATION WITH AN AUXILIARY SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE-PRESSURE MODE.

CLOTHING:
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE (IMPERVIOUS) CLOTHING AND EQUIPMENT TO PREVENT REPEATED OR PROLONGED SKIN CONTACT WITH THIS SUBSTANCE.

GLOVES:
EMPLOYEE MUST WEAR APPROPRIATE PROTECTIVE GLOVES TO PREVENT CONTACT WITH THIS SUBSTANCE.

EYE PROTECTION:
EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT EYE CONTACT WITH THIS SUBSTANCE.

EMERGENCY EYE WASH: WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHOULD PROVIDE AN EYE WASH FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

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