



chemists helping chemists in research & industry

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FEB 11 1991

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JOYCE KILBY/RISK MRMNT & SAFETY

Chemists

DATE: 02/05/91
CUST#: 523216
PO#: LETTER 1/31/91

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE 1

IDENTIFICATION

PRODUCT #: 24764-2 NAME: XYLENES, MIXED, A.C.S. REAGENT
CAS #: 1330-20-7
MF: C8H10

SYNONYMS

BENZENE, DIMETHYL- * DIMETHYLBENZENE * DIMETHYLBENZENE (OSHA) *
KSYLEN (POLISH) * METHYL TOLUENE * NCI-C55232 * RCRA WASTE NUMBER
U239 * UN 1307 (DOT) * VIOLET 3 * XILOLI (ITALIAN) * XYLENE (ACGIH,
DOT, OSHA) * XYLENEN (DUTCH) * XYLOL * XYLOL (DOT) * XYLOLE (GERMAN) *

TOXICITY HAZARDS

RTECS NO: ZE2100000

XYLENE

IRRITATION DATA

EYE-HMN 200 PPM
SKN-RBT 100% MOD
SKN-RBT 500 MG/24H MOD
EYE-RBT 87 MG MLD
EYE-RBT 5 MG/24H SEV

JIHTAB 25,282,43
AMIHAB 14,387,56
28ZPAK -9,24,72
AMIHAB 14,387,56
28ZPAK -9,24,72

TOXICITY DATA

ORL-HMN LDLO:50 MG/KG
IHL-MAN LCLO:10000 PPM/6H
ORL-RAT LD50:4300 MG/KG
IHL-RAT LC50:5000 PPM/4H
IPR-RAT LD50:2459 MG/KG
SCU-RAT LD50:1700 MG/KG
IPR-MUS LD50:1548 MG/KG

YAKUD5 22,883,80
BMJOAE 3,442,70
AMIHAB 14,387,56
NPIRI* 1,123,74
ENVRAL 40,411,86
NPIRI* 1,123,74
AGGHAR 18,109,60

REVIEWS, STANDARDS, AND REGULATIONS

ACGIH TLV-TWA 100 PPM; STEL 150 PPM 85INAB 5,637,86
IARC CANCER REVIEW:ANIMAL INADEQUATE EVIDENCE IMEMDT 47,125,89
IARC CANCER REVIEW:HUMAN INADEQUATE EVIDENCE IMEMDT 47,125,89
IARC CANCER REVIEW:GROUP 3 IMEMDT 47,125,89
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION

FEREAC 54,30848,89
OSHA PEL:8H TWA 100 PPM (435 MG/M3) FEREAC 54,2923,89
OSHA PEL FINAL:8H TWA 100 PPM (435 MG/M3);STEL 150 PPM (655 MG/M3)
FEREAC 54,2923,89

NIOSH REL TO XYLENE-AIR:10H TWA 100 PPM;CL 200 PPM/10M MMWR** 37(2-7),
29,88

NOHS 1974: HZD 76720; NIS 367; TNF 99920; NOS 193; TNE 1016020
NOES 1983: HZD 76720; NIS 379; TNF 124029; NOS 221; TNE 1877151; TFE
364108

EPA GENETOX PROGRAM 1988, NEGATIVE: IN VITRO SCE-HUMAN LYMPHOCYTES;
IN VITRO SCE-HUMAN

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MF: C8H10

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----- TOXICITY HAZARDS -----

EPA TSCA CHEMICAL INVENTORY, JUNE 1990
EPA TSCA 8(A) PRELIMINARY ASSESSMENT INFORMATION, FINAL RULE FER EAC
47, 26992, 82
ON EPA IRIS DATABASE
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, SEPTEMBER 1990
NTP CARCINOGENESIS STUDIES (GAVAGE); NO EVIDENCE: MOUSE, RAT NTPTR* NTP-
TR-327, 1986

NIOSH ANALYTICAL METHODS: SEE HYDROCARBONS, AROMATIC, 1501

TARGET ORGAN DATA

PERIPHERAL NERVE AND SENSATION (FLACCID PARALYSIS WITHOUT ANESTHESIA)
SENSE ORGANS AND SPECIAL SENSES (OTHER OLFACTION EFFECTS)
SENSE ORGANS AND SPECIAL SENSES (CONJUNCTIVA IRRITATION)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
BEHAVIORAL (IRRITABILITY)
LUNGS, THORAX OR RESPIRATION (OTHER CHANGES)
LIVER (FATTY LIVER DEGENERATION)
EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)
EFFECTS ON FERTILITY (ABORTION)
EFFECTS ON EMBRYO OR FETUS (FETOTOXICITY)
SPECIFIC DEVELOPMENTAL ABNORMALITIES (CRANIOFACIAL)
SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)
BIOCHEMICAL EFFECTS (OTHER TRANSFERASES)

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)
DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

----- HEALTH HAZARD DATA -----

ACUTE EFFECTS

HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
CAUSES IRRITATION.
VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.
EXPOSURE CAN CAUSE:
NARCOTIC EFFECT
LUNG IRRITATION, CHEST PAIN AND EDEMA WHICH MAY BE FATAL.
CNS DEPRESSION
DERMATITIS
GASTROINTESTINAL DISTURBANCES

CHRONIC EFFECTS

DAMAGE TO THE LIVER

CONTINUED ON NEXT PAGE

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----- HEALTH HAZARD DATA -----

DAMAGE TO THE KIDNEYS

BLOOD EFFECTS

OVEREXPOSURE MAY CAUSE REPRODUCTIVE DISORDER(S) BASED ON TESTS WITH LABORATORY ANIMALS.

FIRST AID

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.

CALL A PHYSICIAN.

WASH CONTAMINATED CLOTHING BEFORE REUSE.

----- PHYSICAL DATA -----

BOILING PT: 137 C TO 144 C

SPECIFIC GRAVITY: 0.860

VAPOR DENSITY: 3.7

VAPOR PRESSURE: 18 MM @ 37.7 C

APPEARANCE AND ODOR

COLORLESS LIQUID

----- FIRE AND EXPLOSION HAZARD DATA -----

FLASHPOINT: 85 F

AUTOIGNITION TEMPERATURE: 867 F

LOWER EXPLOSION LEVEL: 1.1%

UPPER EXPLOSION LEVEL: 7%

EXTINGUISHING MEDIA

CARBON DIOXIDE, DRY CHEMICAL POWDER, ALCOHOL OR POLYMER FOAM. WATER MAY BE EFFECTIVE FOR COOLING, BUT MAY NOT EFFECT EXTINGUISHMENT.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.

FLAMMABLE.

USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND

FLASH BACK.

CONTAINER EXPLOSION MAY OCCUR UNDER FIRE CONDITIONS.

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----- FIRE AND EXPLOSION HAZARD DATA -----

FORMS EXPLOSIVE MIXTURES IN AIR.

----- REACTIVITY DATA -----

INCOMPATIBILITIES

OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE

----- SPILL OR LEAK PROCEDURES -----

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

EVACUATE AREA.
SHUT OFF ALL SOURCES OF IGNITION.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
COVER WITH AN ACTIVATED CARBON ADSORBENT, TAKE UP AND PLACE IN CLOSED CONTAINERS. TRANSPORT OUTDOORS.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

WASTE DISPOSAL METHOD

BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE.
OBSERVE ALL FEDERAL, STATE, AND LOCAL LAWS.

--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
MECHANICAL EXHAUST REQUIRED.
SAFETY SHOWER AND EYE BATH.
USE NONSPARKING TOOLS.
DO NOT BREATHE VAPOR.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
REPRODUCTIVE HAZARD.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL DRY PLACE.

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--- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE ---

REGULATORY INFORMATION

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