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MATERIAL SAFETY DATA SHEET

SECTION 1. - - - - - - CHEMICAL IDENTIFICATION - - - - - -
CATALOG #: 134449
NAME: P-XYLENE, 99%

SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - -
CAS #: 106-42-3
MF: C8H10
EC NO: 203-396-5

SYNONYMS
CHROMAR * P-DIMETHYLBENZENE * 1,4-DIMETHYLBENZENE * P-METHYLTOLUENE *
SCINTILLAR * 1,4-XYLENE * P-XYLENE (ACGIH;OSHA) * P-XYLOL *

SECTION 3. - - - - - - HAZARDS IDENTIFICATION - - - - - -
LABEL PRECAUTIONARY STATEMENTS

FLAMMABLE
HARMFUL
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
READILY ABSORBED THROUGH SKIN.
REPRODUCTIVE HAZARD.
TARGET ORGAN(S):
NERVES
LIVER, KIDNEYS
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. - - - - - - FIRST-AID MEASURES - - - - - -
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.
REMOVE AND WASH CONTAMINATED CLOTHING PROMPTLY.

SECTION 5. - - - - - - FIRE FIGHTING MEASURES - - - - - -
EXTINGUISHING MEDIA
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE 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.
FORMS EXPLOSIVE MIXTURES IN AIR.

SECTION 6. - - - - - EVACUATE AREA.
SHUT OFF ALL SOURCES OFIGNITION.
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.
SECTION 7. - - - - - - - - HANDLING AND STORAGE- - - - - - - - -
REFER TO SECTION 8.
SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
USE ONLY IN A CHEMICAL FUME HOOD.
SAFETY SHOWER AND EYE BATH.
USE NONSPARKING TOOLS.
DO NOT BREATHE VAPOR.
AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID PROLONGED OR REPEATED EXPOSURE.
READILY ABSORBED THROUGH SKIN.
WASH THOROUGHLY AFTER HANDLING.
IRRITANT.
REPRODUCTIVE HAZARD.
KEEP TIGHTLY CLOSED.
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.
STORE IN A COOL DRY PLACE.
SECTION 9. - - - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - -
APPEARANCE AND ODOR
COLORLESS LIQUID
PHYSICAL PROPERTIES
BOILING POINT: 138 C
MELTING POINT: 12 C TO 13 C
FLASHPOINT 77 F
24 C
EXPLOSION LIMITS IN AIR:
UPPER 7%
LOWER 1.1%
AUTOIGNITION TEMPERATURE: 984 F 528 C
VAPOR PRESSURE: 9MM 20 C 16MM 37.7 C
SPECIFIC GRAVITY: 0.866
VAPOR DENSITY: 3.7
SECTION 10. - - - - - - - - STABILITY AND REACTIVITY - - - - - - - -
INCOMPATIBILITIES
OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
TOXIC FUMES OF:
CARBON MONOXIDE, CARBON DIOXIDE
SECTION 11. - - - - - - - - TOXICOLOGICAL INFORMATION - - - - - -
ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
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
DAMAGE TO THE KIDNEYS
BLOOD EFFECTS
MAY CAUSE REPRODUCTIVE DISORDERS.
TARGET ORGAN(S):
NERVES
LIVER, KIDNEYS
RTECS #: ZE2625000
P-XYLENE
TOxicity DATA

ORL-RAT LD50: 5 GM/KG YAKUD5 22,883,1980
IHL-RAT LC50: 4500 PPM/4H 36YFAG 302,1977
IPR-RAT LD50: 3810 MG/KG 36YFAG 302,1977
IPR-MUS LD50: 2450 UL/KG ARTODN 58,106,1985

Target Organ DATA

Behavioral (general anesthetic)
Cardiac (other changes)
Lungs, thorax or respiration (respiratory depression)
Maternal effects (other effects on female)
Effects on fertility (post-implantation mortality)
Effects on fertility (abortion)
Effects on embryo or fetus (fetal death)
Specific developmental abnormalities (craniofacial)
Only selected registry of toxic effects of chemical substances
(RTCECs) data is presented here. see actual entry in RTECS for complete information.

section 12. - - - - - - - ecological information - - - - - - -
data not yet available.
section 13. - - - - - - - disposal considerations - - - - - - -
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 environmental regulations.

section 14. - - - - - - - transport information - - - - - - -
contact aldrich chemical company for transportation information.

section 15. - - - - - - - regulatory information - - - - - - -

European Information

EC index No: 601-040-00-7
flammable
Harmful
R 10
flammable.
R 20/21
harmful by inhalation and in contact with skin.
R 38
irritating to skin.
S 25
avoid contact with eyes.

Reviews, Standards, and Regulations

OEL=MAC
ACGIH TLV-not classifiable as a human carcinogen DTLVs* TLV/BEI, 1997
ACGIH TLV-STEEL 651 MG/M3 (150 PPM) DTLVs* TLV/BEI, 1997
ACGIH TLV-TWA 434 MG/M3 (100 PPM) DTLVs* TLV/BEI, 1997
MSHA Standard-Air-TWA 100 PPM (440 MG/M3) (skin)
DTLVs* 3,281,1971
OSHA PEL (GEN INDU): 8H TWA 100 PPM (435 MG/M3)
CFRGRB 29,1910.1000,1994
OSHA PEL (CONSTRUC): 8H TWA 100 PPM (435 MG/M3)
CFRGRB 29,1926.55,1994
OSHA PEL (SHIPYARD): 8H TWA 100 PPM (435 MG/M3)
CFRGRB 29,1915.1000,1993
OSHA PEL (FED CONT): 8H TWA 100 PPM (435 MG/M3)
CFRGRB 41,50-204.50,1994
NIOSH REL TO P-Xylene-air: 10H TWA 100 PPM; STEL 150 PPM
NIOSH DHHS #92-100,1992

NOHS 1974: HZD M1028; NIS 4; TNF 62; NOS 10; TNE 1912
NOES 1983: HZD M1028; NIS 22; TNF 1994; NOS 21; TNE 20366; TFE 6336
EPA TSCA section 8(B) chemical inventory
EPA TSCA section 8(A) preliminary assessment information, final rule
FERAEAC 47,26992,82
EPA TSCA section 8(D) unpublished health/safety studies
EPA TSCA test submission (tscats) data base, december 1998

U.S. Information
this product is subject to SARA section 313 reporting requirements.
SECTION 16. OTHER INFORMATION

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
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