

Common Name: XYLENES
Synonyms: Dimethylbenzene; Methyl Toluene (mixed isomers); Xylol

CAS No: 1330-20-7

Molecular Formula: C₆H₄(CH₃)₂
RTK Substance No: 2014

Description: Colorless liquids with a faint, sweet odor

HAZARD DATA

| Hazard Rating | Firefighting | Reactivity |
|---|---|--|
| 2 - Health 3 - Fire 0 - Reactivity DOT#: UN 1307 ERG Guide #: 130 Hazard Class: 3 (Flammable) | FLAMMABLE LIQUIDS Use dry chemical, CO ₂ , water spray or foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE. CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Vapors are heavier than air and may travel a distance to cause a fire or explosion far from the source and flash back. Flow or agitation may generate electrostatic charges. Xylenes may form an ignitable vapor/air mixture in closed tanks or containers. | Xylenes react with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE) and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC). |

SPILL/LEAKS

Isolation Distance:

Spill: 50 meters (150 feet)

Fire: 800 meters (1/2 mile)

 Absorb *liquids* in dry sand, earth, or a similar material and place into sealed containers for disposal.

 Ground and bond containers when transferring **Xylenes**.

Use only non-sparking tools and equipment.

 Keep **Xylenes** out of confined spaces, such as sewers, because of the possibility of an explosion.

DO NOT wash into sewer.

Xylenes are toxic to aquatic organisms.

PHYSICAL PROPERTIES

| | |
|------------------------------|--------------------------------|
| Odor Threshold: | 0.07 to 40 ppm |
| Flash Point: | 63° to 77°F (17° to 25°C) |
| LEL: | 0.9 to 1.1% |
| UEL: | 6.7 to 7% |
| Auto Ignition Temp: | 867° to 984°F (464° to 529°C) |
| Vapor Density: | 3.7 (air = 1) |
| Vapor Pressure: | 7 to 9 mm Hg at 68°F (20°C) |
| Specific Gravity: | 0.86 (water = 1) |
| Water Solubility: | Insoluble |
| Boiling Point: | 279° to 291°F (137° to 144°C) |
| Freezing Point: | -53°F (-47°C) to 55.4°F (13°C) |
| Ionization Potential: | 8.44 to 8.56 eV |
| Molecular Weight: | 106.2 |

EXPOSURE LIMITS

OSHA: 100 ppm, 8-hr TWA

NIOSH: 100 ppm, 10-hr TWA; 150 ppm, STEL

ACGIH: 100 ppm, 8-hr TWA; 150 ppm, STEL

IDLH: 900 ppm

The Protective Action Criteria values are:

PAC-1 = 130 ppm PAC-2 = 920 ppm PAC-3 = 2,500 ppm

PROTECTIVE EQUIPMENT

| | |
|--------------------|--|
| Gloves: | Vinton/Butyl, Polyvinyl Alcohol, Silver Shield®/4H®, Viton and Barrier® (>8-hr breakthrough) |
| Coveralls: | Tychem® BR, CSM and TK (>8-hr breakthrough) Use turnout gear or flash protection if ignition/fire is the greatest hazard |
| Respirator: | >100 ppm - full facepiece APR with <i>Organic vapor cartridge</i> >900 ppm - SCBA |

HEALTH EFFECTS

Eyes: Irritation

Skin: Irritation (skin absorbable)

Inhalation: Nose and throat irritation with coughing and wheezing

Headache, dizziness, lightheadedness, and passing out

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility.