

Section 1: Product and Company Identification

Middlesex Gases & Technologies

292 Second Street
P.O. Box 490249
Everett, MA 02149
(617) 387-5050
(800) 649-6704
Fax (617) 387-3537
<http://www.middlesexgases.com/>

Product Code: p-Xylene

Section 2: Hazards Identification



Warning

Hazard Classification:

Acute Dermal Toxicity (Category 4)
Flammable (Category 2)
Gases Under Pressure

Hazard Statements:

Contains gas under pressure; may explode if heated
Flammable gas
Harmful in contact with skin

Precautionary Statements

Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Wear protective gloves and protective clothing.

Response:

Eliminate all ignition sources if safe to do so.
Wash with plenty of water
Call a poison center or doctor if you feel unwell.
Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
Take off contaminated clothing and wash it before reuse.

Storage:

Protect from sunlight.
Store in well-ventilated place.

Disposal:

Dispose of contents and/or container in accordance with applicable regulations.

Section 3: Composition/Information on Ingredients

| |
|--------------|
| CAS # |
| 106-42-3 |

| Chemical Substance | Chemical Family | Trade Names |
|--------------------|------------------------|---|
| P-XYLENE | hydrocarbons, aromatic | BENZENE, 1,4-DIMETHYL-; P-DIMETHYLBENZENE; 1,4-DIMETHYLBENZENE; P-METHYLTOLUENE; 4-METHYLTOLUENE; 1,4-XYLENE; P-XYLOL; RCRA U239; STCC 4909351; UN 1307; O-5082 |

Section 4: First Aid Measures

| Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|--|--|---|--|--|
| Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse. | Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention. | Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. For ingestion, consider gastric lavage. |

Section 5: Fire Fighting Measures

| Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|--|--|--|
| Regular dry chemical, carbon dioxide, water, regular foam Large fires: Use regular foam or flood with fine water spray. | Carbon monoxide, carbon dioxide and toxic and irritating fumes | <ul style="list-style-type: none"> ▪ Any self-contained breathing apparatus with a full facepiece. ▪ Any self-contained breathing apparatus with a full facepiece. |

Section 6: Accidental Release Measures

| Personal Precautions | Environmental Precautions | Methods for Containment |
|--|---|--|
| Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | Avoid heat, flames, sparks and other sources of ignition. | Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. Dig holding area such as lagoon, pond or pit for containment. |

| Methods for Cleanup | Other Information |
|---|--|
| Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Collect with absorbent into suitable container. Cover with absorbent sheets, spill-control pads or pillows. Neutralize. Collect with absorbent into suitable container. Absorb with activated carbon. Remove trapped material with suction hoses. Collect spilled material using mechanical equipment. | Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S.SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA). |

Section 7: Handling and Storage

| Handling | Storage |
|--|---|
| Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 125°F (52°C). Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods. | Do not get liquid in eyes, on skin, or clothing. Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Open valve slowly. Close cylinder valve after each use; keep closed even when empty. If valve is hard to open, discontinue use and contact your supplier. |

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

P-XYLENE: XYLENE: 100 ppm (435 mg/m³) OSHA TWA 150 ppm (651 mg/m³) OSHA STEL (vacated by 58 FR 35338, June 30, 1993) 100 ppm ACGIH TWA 150 ppm ACGIH STEL 100 ppm (435 mg/m³) NIOSH recommended TWA 10 hour(s) 150 ppm (655 mg/m³) NIOSH recommended STEL

Engineering Controls

Handle only in fully enclosed systems.

| Eye Protection | Skin Protection | Respiratory Protection |
|---|---|---|
| Wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. | Wear appropriate chemical resistant clothing. | Any self-contained breathing apparatus with a full facepiece. |

General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

| Physical State | Appearance | Color | Change in Appearance | Physical Form | Odor | Taste |
|----------------|------------|-----------|----------------------|---------------|------------|-------|
| Liquid | Clear | Colorless | N/A | Liquid | Sweet odor | N/A |

| Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|------------------|--------------|-----------------------|--------------------------|------------------------|------------------------|
| 81 F (27 C) (CC) | IC | Not available | 982 F (528 C) | 0.07 | 0.011 |

| Boiling Point | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity | Water Solubility | pH | Odor Threshold | Evaporation Rate | Viscosity |
|---------------|----------------|-----------------|---------------|------------------|------------------|---------------|----------------|-----------------------|---------------|
| 280 F (138 C) | 55 F (13 C) | 8.6 mmHg @ 25 C | 3.7 (Air=1) | 0.8611 | Insoluble | Not available | 0.47 ppm | 0.7 (butyl acetate=1) | Not available |

| Molecular Weight | Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|------------------|-------------------|---------------|-------------------|----------------------|---------------|---|
| 106.17 | C8-H10 | Not available | Not available | 100% | Not available | Soluble: Alcohol, ether, benzene, acetone, organic solvents |

Section 10: Stability and Reactivity

| Stability | Conditions to Avoid | Incompatible Materials |
|---|---|---|
| Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Acids, combustible materials, oxidizing materials, air, nitric acid |

| Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|----------------------------------|------------------------------------|
| Oxides of carbon | Will not polymerize. |

Section 11: Toxicology Information

Acute Effects

| Oral LD50 | Dermal LD50 | Inhalation |
|--------------------------|---------------|---|
| 3910 mg/kg oral-rat LD50 | Not available | Irritation, low body temperature, ringing in the ears, nausea, vomiting, stomach pain, headache, drowsiness, symptoms of drunkenness, visual disturbances, lung congestion, kidney damage, liver damage, coma |

| Eye Irritation | Skin Irritation | Sensitization |
|---------------------------------------|-----------------------------|--|
| Irritation (possibly severe), tearing | Severe irritation, blisters | Respiratory tract irritation, skin irritation, eye irritation, central nervous system depression POSSIBLE TERATOGEN/EMBRYOTOXIN |

Chronic Effects

| Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|-----------------|---------------|----------------------|-----------------------|
| Not available | Not available | Available. | No data |

Section 12: Ecological Information

Fate and Transport

| Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|---|-----------------------------|--------------------------------|-------------------------|
| Fish toxicity: 8800 ug/L 96 hour(s) LC50 (Mortality) Guppy (Poecilia reticulata) Invertebrate toxicity: 3600 ug/L 24 hour(s) EC50 (Immobilization) Water flea (Daphnia magna) Algal toxicity: 4400 ug/L 8 hour(s) EC50 (Growth) Green algae (Selenastrum capricornutum) Phyto toxicity: Not available Other toxicity: Not available | Not available | Not available | Not available |

Section 13: Disposal Considerations

Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U239. Dispose in accordance with all applicable regulations.

Section 14: Transportation Information

U.S. DOT 49 CFR 172.101

| Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|----------------------|-----------|--------------------------|---------------|-----------------------|--|--|---------------------------------|
| Xylenes | UN1307 | 3 | II | 3 | N/A | N/A | N/A |

Canadian Transportation of Dangerous Goods

| Shipping Name | UN Number | Class | Packing Group / Risk Group |
|---------------|-----------|-------|----------------------------|
| Xylenes | UN1307 | 3 | II |

Section 15: Regulatory Information

U.S. Regulations

| CERCLA Sections | SARA 355.30 | SARA 355.40 |
|-----------------|----------------|----------------|
| 100 LBS RQ | Not regulated. | Not regulated. |

SARA 370.21

| Acute | Chronic | Fire | Reactive | Sudden Release |
|-------|---------|------|----------|----------------|
| Yes | No | Yes | No | No |

SARA 372.65

P-Xylene

OSHA Process Safety

Not regulated.

State Regulations

CA Proposition 65

Not regulated.

Canadian Regulations

WHMIS Classification

BD2

National Inventory Status

| US Inventory (TSCA) | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|----------------------|---|-----------------------------|
| Listed on inventory. | P-XYLENE CAS NUMBER: 106-42-3 SECTION 4 | Not determined. |

Section 16: Other Information

NFPA Rating

HEALTH=2 FIRE=3 REACTIVITY=0

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard