

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS

Issue: November 16

PRODUCT: Xylene
Other Names: Dimethyl Benzene, Xylenes (Mixed Isomers)
Uses: Industrial solvent, coatings ingredient, thinner component

| | |
|------------------------------|------|
| UN No. | 1307 |
| Dangerous Goods Class | 3 |
| Subsidiary Risk | None |
| Pack Group | III |
| Hazchem | 3Y |
| Poison Schedule | 6 |

| | |
|----------------------------------|--|
| Hazardous Nature: | This product is classified as hazardous under GHS for Australia criteria |
| Hazardous Classification: | Flammable Liquids: 3; Acute Toxicity - Oral: 3; Acute Toxicity - Inhalation: 4; Acute Toxicity - Dermal 4; Acute Aquatic Toxicant: 3 |
| Hazardous Statement: | Flammable liquid and vapour |
| Exposure Standards: | TWA: 350 mg/m ³ (80 ppm); STEL: 543 mg/m ³ (125 ppm) |

Physical Characteristics (Typical)

Section 9 of SDS

| | |
|--|---|
| Appearance | Clear, colourless liquid |
| Boiling Point/ Range (°C): | 136 – 145 |
| Flash Point (°C): | 23 – 27 |
| Specific Gravity/ Density (g/ml @ 15°C): | 0.87 |
| Chemical Stability: | Stable at room temperature and pressure |

Product Ingredients

Section 3 of SDS

| | | |
|-------------------------|-----------|----------|
| Xylene | 1330-20-7 | 100 |
| Contains: Ethyl Benzene | 100-41-4 | Up to 30 |

For further ingredients information, please refer to the full SDS.

GHS Pictograms

Section 2 of SDS



For further Risk and Safety information, please refer to the full SDS.

DEFINITIONS

| | |
|---------------------|---|
| Dangerous Goods | Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993 |
| Poisonous Substance | Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification. |
| Hazardous Substance | Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited. |

1. IDENTIFICATION

| | |
|-----------------------------|--|
| Product Name: | Xylene |
| Other Names: | Dimethyl Benzene, Xylenes (Mixed Isomers) |
| Chemical Family: | Aromatic Solvent |
| Recommended Use: | Industrial solvent, coatings ingredient, thinner component |
| Supplier: | Sydney Solvents Pty. Ltd. |
| ABN: | 51 104 642 695 |
| Street Address: | 3/10 Production Place, Jamisontown NSW 2750 |
| Telephone: | 02 4722 5060 |
| Fax: | 02 4722 5070 |
| Emergency phone: | CHEMCALL: 1800 127 406 |
| All other inquiries: | 1800 60 50 40 |

2. HAZARDS IDENTIFICATION

Hazardous Nature

This product is classified as hazardous under GHS for Australia criteria

Hazardous Classification

Flammable Liquids: 3; Acute Toxicity - Oral: 3; Acute Toxicity - Inhalation: 4; Acute Toxicity - Dermal 4; Acute Aquatic Toxicant: 3

Hazardous Statement

Flammable liquid and vapour

GHS Pictograms



Hazard Statements

H226: Flammable liquid and vapour

H332: Harmful if inhaled

H312: Harmful in contact with skin

H315: Causes skin irritation

H411: Toxic to aquatic life with long lasting effects

Precautionary Statements

P102: Keep out of reach of children.

P262: Do not get in eyes, on skin, or on clothing.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P262: Do not get in eyes, on skin, or on clothing.

P273: Avoid release to the environment.

Dangerous Goods Classification 3

Poisons Schedule 6

3. COMPOSITION: Information on Ingredients

| Chemical Ingredient | CAS No. | Proportion (%v/v) |
|-------------------------|-----------|-------------------|
| Xylene | 1330-20-7 | 100 |
| Contains: Ethyl Benzene | 100-41-4 | Up to 30 |

4. FIRST AID MEASURES

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

Ingestion

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

Eye Contact

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

Skin Contact

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

Inhalation

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

First Aid facilities

Provide eye baths and safety showers.

Medical Attention

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

Suitable extinguishing media

Dry chemical or foam

Hazards from combustion products

Carbon monoxide, carbon dioxide, other organic compounds solid, liquid and gas

Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

Hazchem Code: 3Y

6. ACCIDENTAL RELEASE MEASURES**Emergency Procedures**

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

Methods and materials for containment**Major Land Spill**

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

- See “First Aid Measures” and “Stability and Reactivity”

Major Water Spill

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See “First Aid Measures” and “Stability and Reactivity”.

7. HANDLING AND STORAGE**Precautions for safe handling**

This product is flammable. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. Handle containers with care. Open slowly to control possible pressure release. Material will accumulate static charge. Use grounding leads to avoid discharge (electrical spark).

Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are combustible. This product will fuel a fire in progress.

Incompatible materials

Natural rubbers, neoprene, butyl and, or nitrile rubbers

8. EXPOSURE CONTROLS: PERSONAL PROTECTION**National Exposure Standards**

The time weighted average concentration (TWA) for this product is: 350 mg/m³ (80 ppm), which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: 543 mg/m³ (125 ppm), which is the maximum allowable exposure concentration at any time.

Biological limit values

BEI: Biological Exposure Index - 1.5 g/g creatinine at end of shift

Engineering Controls: Ventilation

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment

Respiratory Protection: Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type “A” filter material is considered suitable for this product.

Eye Protection: Always use safety glasses or a face shield when handling this product.

Skin/ Body Protection: Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Property | Unit of measurement | Typical value |
|------------------------------|---------------------|--------------------------|
| Appearance | - | Clear, colourless liquid |
| Boiling Point/ Range | °C | 136 – 145 |
| Flash Point | °C | 23 – 27 |
| Density @ 15°C | g/ml | 0.87 |
| Vapour Pressure @ 20°C | kPa | 0.8 - 1.2 |
| Explosive Limits (LEL – UEL) | % | 1.0 – 7.1 |
| Vapour Density @ 20°C | kPa | 3.7 |

| Property | Unit of measurement | Typical value |
|--------------------------|---------------------|---------------|
| Autoignition Temperature | °C | 432 – 530 |
| Viscosity @ 20°C | mm ² /s | < 9 |
| Percent Volatiles | % | 100 |
| Solubility with Water | kg/m ³ | 0.175 |

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable at room temperature and pressure

Conditions to avoid

Sources of heat and ignition, open flames.

Hazardous decomposition products

Carbon monoxide, carbon dioxide and organic complexes on incomplete burning or oxidation

Hazardous reactions

Mixing with strong oxidising agents causes violent reactions

Hazardous Polymerisation

Will not occur

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

If swallowed, may cause lung damage on vomiting. Will cause central nervous system depression. May cause discomfort on swallowing. Vapours will cause drowsiness and dizziness and ingestion may result in headaches and nausea.

Eye Contact

Eye contact with this product will cause redness and swelling with a burning sensation and blurred vision.

Skin Contact

Harmful in contact with skin. Symptoms include burning sensation, redness, swelling and possible blistering

Inhalation

Harmful by inhalation. Vapours will cause dizziness and drowsiness. There is the possibility of organ damage over prolonged use or exposure. Central Nervous System depression includes nausea, headaches, dizziness, and possibly loss of consciousness.

Chronic Effects

This product may contain up to 30% of ethylbenzene. IARC has evaluated ethylbenzene and classified it as a "possible human carcinogen" (Group 2B) based on sufficient evidence for cancer in exposed humans. This product may contain 0.1 to 1% naphthalene. IARC evaluated naphthalene and concluded that there was sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Accordingly, IARC classified naphthalene as a possible human carcinogen (Group 2B).

Other Health Effects Information

Persons with pre-existing liver, kidney, central nervous system or skin complaints should avoid unnecessary exposure to this product. Every effort to protect eyes, respiratory tract and skin exposure should be taken in these circumstances.

Toxicological Information

Oral LD₅₀: Rat: 4300 mg/kg

Dermal TC_{Lo}: Rat (Inhal) LC₅₀: 5000ppm/4hr

12. ECOLOGICAL INFORMATION**Ecotoxicity****Aquatic Toxicity**

| | |
|--|--|
| Fish Toxicity (rainbow trout, goldfish, bluegill): | LC ₅₀ (96hr): No data available |
| Daphnia Magna EC ₅₀ (24 hr): | No data available |
| Blue-green algae (Toxicity threshold 7-8 days): | LO _{EC} : >200000 µg/L |
| Green algae (Toxicity threshold 7-8 days): | EC ₅₀ : 72000 µg/L |

Persistence/ degradability

Readily biodegradable. Oxidises rapidly by photo-chemical reactions in air.

Mobility

If product enters soil, it will be highly mobile and may contaminate groundwater.

13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product must be disposed as chemical waste in accordance with the local authority.

14. TRANSPORT INFORMATION

| Road and Rail Transport | | Marine Transport | | Air Transport | |
|-------------------------|--------|----------------------|--------|----------------------|--------|
| UN No. | 1307 | UN No. | 1307 | UN No. | 1307 |
| Proper Shipping Name | Xylene | Proper Shipping Name | Xylene | Proper Shipping Name | Xylene |
| DG Class | 3 | DG Class | 3 | DG Class | 3 |
| Sub. Risk | None | Sub. Risk | None | Sub. Risk | None |
| Pack Group | III | Pack Group | III | Pack Group | III |
| Hazchem | 3Y | Hazchem | 3Y | Hazchem | 3Y |

Dangerous Goods Segregation

This product is classed as Dangerous Goods Class 3, packing group III. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

15. REGULATORY INFORMATION

Country/ Region: Australia

Inventory: AICS

Status: Listed

Poisons Schedule: 6

16. OTHER INFORMATION

Reasons for Issue: Upgrade to GHS SDS; Amalgamated supplier changes in all sections

Abbreviations:

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

References:

- Supplier Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (January 16)
- <http://hsis.ascc.gov.au/SearchHS.aspx> (January 16)
- Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (January 16)
- Sax's Dangerous Properties of Industrial Materials, Richard J. Lewis Snr., pub. Canada (2000)

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Sydney Solvents Pty. Ltd.