

Xylene, histology grade

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 05/24/2021

Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form	: Mixture
Trade name	: Xylene, histology grade
CAS-No.	: 1330-20-7
Product code	: 08389
Formula	: C8H10
Synonyms	: Benzene, dimethyl- / Dimethylbenzene (mixed isomers) / Xylene / Xylene (all isomers) / Xylene (mixed isomers) / Xylene (o-, m-, p- isomers) / Xylenes / Xylenes (mixed isomers) / Dimethylbenzene / Xylol / Benzene, dimethyl-, mixed isomers / Xylenes (all isomers) / XYLENE / Dimethylbenzenes / Xylene isomers mixture / Dimethylbenzene (2-, 3-, 4-isomers) / Dimethylbenzene (mixed 2-, 3-, 4-isomers) / Xylenes (ortho-, meta-, para- isomers) / C8 Disubstituted benzenes

1.2. Recommended use and restrictions on use

Recommended use	: Use as laboratory reagent, Manufacture of substances
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1.3. Supplier

Supplier

Polysciences
400 Valley Road
Warrington, PA 18976 - United States
T +1 215 343 6484 - F +1 215 343 0214
info@polysciences.com - www.polysciences.com

1.4. Emergency telephone number

Emergency number	: 24-hour emergency phone number ChemTel 1-800-255-3924
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3	Flammable liquid and vapor
Acute toxicity (dermal) Category 4	Harmful in contact with skin
Acute toxicity (inhalation) Category 4	Harmful if inhaled
Skin corrosion/irritation Category 2	Causes skin irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)	:
Signal word (GHS US)	: Warning
Hazard statements (GHS US)	: Flammable liquid and vapor Harmful in contact with skin or if inhaled Causes skin irritation
Precautionary statements (GHS US)	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

SECTION 4: First-aid measures

4.1. Description of first aid measures

- | | |
|---------------------------------------|---|
| First-aid measures general | : Call a poison center/doctor/physician if you feel unwell. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. |
| First-aid measures after skin contact | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| First-aid measures after ingestion | : Call a poison center/doctor/physician if you feel unwell. |

4.2. Most important symptoms and effects (acute and delayed)

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|-------------------------------------|---------------|
| Symptoms/effects after skin contact | : Irritation. |
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
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5.2. Specific hazards arising from the chemical

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| Fire hazard | : Flammable liquid and vapor. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Special protective equipment and precautions for fire-fighters

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| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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| Emergency procedures | : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. |
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6.1.2. For emergency responders

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|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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|-------------------------|---|
| Methods for cleaning up | : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store at room temp.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Xylene, histology grade (1330-20-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Xylene, mixed isomers (Dimethylbenzene)
ACGIH TWA (ppm)	100 ppm
ACGIH STEL (ppm)	150 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2020
USA - ACGIH - Biological Exposure Indices	
Local name	XYLENES (Technical or commercial grade)
Biological Exposure Indices (BEI)	1.5 g/g Kreatinin Parameter: Methylhippuric acids - Medium: urine - Sampling time: end of shift
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Xylenes (o-, m-, p-isomers)
OSHA PEL (TWA) (mg/m ³)	435 mg/m ³
OSHA PEL (TWA) (ppm)	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless liquid.
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: -47.9 – 13.3 °C
Freezing point	: No data available
Boiling point	: 138.3 – 141.4 °C
Flash point	: 27 (23 – 27) °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 8.8 – 11.9 hPa (at 25 °C)
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 0.84 g/cm ³ (at 25 °C)
Solubility	: Water: 146 - 175 mg/l (at 25 °C)
Partition coefficient n-octanol/water (Log Pow)	: 2.77 – 3.15
Auto-ignition temperature	: 465 – 525 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Harmful if inhaled.

Xylene, histology grade (1330-20-7)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	> 4350 mg/kg
LC50 Inhalation - Rat	29.08 mg/l/4h
ATE US (oral)	3500 mg/kg body weight
ATE US (dermal)	1700 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Xylene, histology grade (1330-20-7)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Xylene, histology grade (1330-20-7)	
LOAEL (oral,rat,90 days)	150 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPP 82-1 (90-Day Oral Toxicity)

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Xylene, histology grade (1330-20-7)	
LC50 fish 1	13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	3.82 mg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	2.661 – 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
NOEC chronic fish	> 1.3 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri) Duration: '56 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Xylene, histology grade (1330-20-7)	
BCF fish 1	0.6 – 15
Partition coefficient n-octanol/water (Log Pow)	2.77 – 3.15

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

- Regional legislation (waste) : U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII. U.S. - RCRA (Resource Conservation & Recovery Act) - Constituents for Detection Monitoring. U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents. U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards. U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground Water Monitoring. U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes - Acutely Toxic Wastes & Other Hazardous Characteristics.
- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Xylene, histology grade (1330-20-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
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15.2. International regulations

CANADA

Xylene, histology grade (1330-20-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Xylene, histology grade (1330-20-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Japanese Poisonous and Deleterious Substances Control Law
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on CICR (Turkish Inventory and Control of Chemicals)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

Xylene, histology grade (1330-20-7)

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
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SECTION 16: Other information

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SDS US (GHS HazCom 2012)

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