

SECTION 1: Identification

1.1. Identification

Product form	: Substance
Substance name	: Xylenes, ACS
CAS-No.	: 1330-20-7
Product code	: LC26970
Formula	: C ₈ H ₁₀
Synonyms	: benzene, dimethyl- / dimethylbenzene, mixture of isomers / dimethylbenzol, mixture of isomers / methyltoluene, mixture of isomers / mixed xylenes / xylol
Other means of identification	: Xylenes, mixture of ortho, meta and para isomers with ethylbenzene

1.2. Recommended use and restrictions on use

Use of the substance/mixture	: Solvent Cleaning product Chemical raw material
Recommended use	: Laboratory chemicals
Restrictions on use	: Not for food, drug or household use

1.3. Supplier

LabChem, Inc.
 1010 Jackson's Pointe Ct.
 Zellenople, PA 16063 - USA
 T 412-826-5230 - F 724-473-0647
 info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number	: CHEMTREC: 1-800-424-9300 or +1-703-741-5970
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3	H226	Flammable liquid and vapor
Acute toxicity (dermal) Category 4	H312	Harmful in contact with skin
Acute toxicity (inhalation) Category 4	H332	Harmful if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure
Aspiration hazard Category 1	H304	May be fatal if swallowed and enters airways
Full text of H statements : see section 16		

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2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H312+H332 - Harmful in contact with skin or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H373 - May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure

Precautionary statements (GHS US)

: P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe vapors.
P264 - Wash exposed skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, face protection, protective clothing, protective gloves.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P314 - Get medical advice and attention if you feel unwell.
P331 - Do NOT induce vomiting
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use carbon dioxide (CO₂), powder, alcohol-resistant foam to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to comply with local, state and federal regulations.

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type

: Multi-constituent

Name

: Xylenes, ACS

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CAS-No. : 1330-20-7

Name	Product identifier	%	GHS US classification
Xylenes	CAS-No.: 1330-20-7	65 – 100	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
ethylbenzene	CAS-No.: 100-41-4	10 – 35	Not classified
cumene	CAS-No.: 98-82-8	0.1 – 1	Not classified

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.
First-aid measures after inhalation	: Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.
First-aid measures after skin contact	: If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.
First-aid measures after eye contact	: Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.
First-aid measures after ingestion	: Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

Potential Adverse human health effects and symptoms	: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Causes skin irritation. Harmful in contact with skin. Harmful if inhaled. Caution! Substance is absorbed through the skin.
Symptoms/effects after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Central nervous system depression. Dizziness. Headache. Coordination disorders. Disturbed motor response. Impaired memory. Disturbances of consciousness.
Symptoms/effects after skin contact	: Tingling/irritation of the skin.
Symptoms/effects after eye contact	: No effects known.
Symptoms/effects after ingestion	: AFTER ABSORPTION OF LARGE QUANTITIES: Enlargement/disease of the liver. Symptoms similar to those listed under inhalation.
Chronic symptoms	: Dry skin. Itching.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Quick-acting ABC powder extinguisher. Quick-acting BC powder extinguisher. Quick-acting class B foam extinguisher. Quick-acting CO2 extinguisher. Class B foam (not alcohol-resistant).
- Unsuitable extinguishing media : Water (quick-acting extinguisher, reel); risk of puddle expansion. Water; risk of puddle expansion.

5.2. Specific hazards arising from the chemical

- Fire hazard : DIRECT FIRE HAZARD. Flammable liquid and vapour. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. May build up electrostatic charges: risk of ignition.
- Explosion hazard : DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits. INDIRECT EXPLOSION HAZARD. may be ignited by sparks.
- Hazardous decomposition products in case of fire : Upon combustion: CO and CO2 are formed.

5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and windows.
- Firefighting instructions : Cool tanks/drums with water spray/remove them into safety.
- Protection during firefighting : Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Gloves (EN 374). Face shield (EN 166). Protective clothing (EN 14605 or EN 13034).
- Emergency procedures : Mark the danger area. Stop engines and no smoking. No naked flames or sparks. Spark- and explosion-proof appliances and lighting equipment. Wash contaminated clothes. Large spills/in confined spaces: consider evacuation.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Do not breathe gas, fumes, vapor or spray.
- Emergency procedures : If a major spill occurs, all personnel should be immediately evacuated and the area ventilated. Stop release. Ventilate area.

6.2. Environmental precautions

Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

- For containment : Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills. Heating: dilute combustible gas/vapour with water curtain.
- Methods for cleaning up : Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite or powdered limestone. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep container tightly closed. Do not discharge the waste into the drain. Do not use compressed air for pumping over.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Incompatible products : Strong oxidizers.
- Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. Ignition sources.
- Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. oxidizing agents. strong acids. halogens. highly flammable materials.
- Storage area : Meet the legal requirements. Keep container in a well-ventilated place. Fireproof storeroom. Provide for a tub to collect spills. Provide the tank with earthing.
- Special rules on packaging : SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Xylenes, ACS (1330-20-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	100 ppm
ACGIH STEL (ppm)	150 ppm
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	435 mg/m ³
OSHA PEL (TWA) [2]	100 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH [ppm]	900 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	435 mg/m ³
NIOSH REL TWA [ppm]	100 ppm
NIOSH REL (STEL)	655 mg/m ³
NIOSH REL STEL [ppm]	150 ppm
Xylenes (1330-20-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	100 ppm
ACGIH STEL (ppm)	150 ppm

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Xylenes (1330-20-7)

USA - OSHA - Occupational Exposure Limits

OSHA PEL (TWA) [1]	435 mg/m ³
OSHA PEL (TWA) [2]	100 ppm

USA - IDLH - Occupational Exposure Limits

IDLH [ppm]	900 ppm
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USA - NIOSH - Occupational Exposure Limits

NIOSH REL (TWA)	435 mg/m ³
NIOSH REL TWA [ppm]	100 ppm
NIOSH REL (STEL)	655 mg/m ³
NIOSH REL STEL [ppm]	150 ppm

ethylbenzene (100-41-4)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	20 ppm
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cumene (98-82-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	5 ppm
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8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses.

Materials for protective clothing:

GIVE EXCELLENT RESISTANCE: PVA. GIVE GOOD RESISTANCE: viton. tetrafluoroethylene. nitrile rubber. GIVE POOR RESISTANCE: butyl rubber. natural rubber. neoprene. polyethylene

Hand protection:

Protective gloves against chemicals (EN 374)

Eye protection:

Face shield (EN 166)

Skin and body protection:

Protective clothing (EN 14605 or EN 13034)

Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit

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Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: Colourless to light yellow
Odor	: Pleasant odour Aromatic odour
Odor threshold	: 1 ppm
pH	: No data available in the literature
Melting point	: -48 – 13 °C (1013 hPa)
Freezing point	: -34 °C
Boiling point	: 138 – 145 °C (1013 hPa)
Critical temperature	: 346 – 359 °C
Critical pressure	: 35160 – 37100 hPa
Flash point	: 25 °C
Relative evaporation rate (butyl acetate=1)	: 0.7
Relative evaporation rate (ether=1)	: 9.2 – 13.5
Flammability (solid, gas)	: No data available
Vapor pressure	: 6.5 – 8.7 hPa (20 °C)
Vapor pressure at 50 °C	: 32 – 43 hPa
Relative vapor density at 20 °C	: 3.7
Relative density	: 0.86 – 0.88 (25 °C)
Relative density of saturated gas/air mixture	: 1.02
Density	: 860 – 880 kg/m ³ (25 °C)
Molecular mass	: 106.17 g/mol
Solubility	: Insoluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in petroleum spirit. Water: 0.015 - 0.017 g/100ml (25 °C) Ethanol: complete Ether: complete
Log Pow	: 3.2 (Read-across, 20 °C)
Auto-ignition temperature	: 527 °C
Decomposition temperature	: No data available in the literature
Viscosity, kinematic	: 0.74 mm ² /s (20 °C)
Viscosity, dynamic	: 0.581 – 0.76 mPa·s (25 °C)
Explosion limits	: 0.9 - 1.1 - 6.7 - 7 vol % Lower explosive limit (LEL): 0.9 – 1.1 vol % Upper explosive limit (UEL): 6.7 – 7 vol %
Explosive properties	: Not classified.
Oxidizing properties	: Not classified.

9.2. Other information

Minimum ignition energy	: 0.2 mJ
Specific conductivity	: 0.1 pS/m
Saturation concentration	: 29 – 37 g/m ³ (20 °C)
VOC content	: 100 %
Other properties	: Gas/vapour heavier than air at 20°C. Clear. Physical properties depending on the composition. Slightly volatile. May generate electrostatic charges.

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SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with (strong) oxidizers: (increased) risk of fire/explosion. Reacts with (some) acids.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

High temperature. Incompatible materials. Open flame. Sparks.

10.5. Incompatible materials

Strong oxidizers. Strong acids.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Xylenes, ACS (1330-20-7)

LD50 oral rat	> 4000 mg/kg body weight (Equivalent or similar to EU Method B.1, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 4200 mg/kg body weight (4 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	29.09 mg/l (Equivalent or similar to EU Method B.2, 4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (dermal)	1100 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

Xylenes (1330-20-7)

LD50 oral rat	> 4000 mg/kg body weight (Equivalent or similar to EU Method B.1, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 4200 mg/kg body weight (4 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	29.09 mg/l (Equivalent or similar to EU Method B.2, 4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h

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Xylenes (1330-20-7)

ATE US (dust, mist)	1.5 mg/l/4h
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ethylbenzene (100-41-4)

LD50 oral rat	3500 mg/kg (Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	15433 mg/kg body weight (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))

cumene (98-82-8)

LD50 oral rat	2700 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 014 day(s))
LD50 dermal rabbit	> 3160 mg/kg body weight (24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	39 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours), 14 day(s))

Skin corrosion/irritation	: Causes skin irritation. pH: No data available in the literature
Serious eye damage/irritation	: Causes serious eye irritation. pH: No data available in the literature
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Xylenes, ACS (1330-20-7)

IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.

Xylenes (1330-20-7)

STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure.

Xylenes (1330-20-7)

STOT-repeated exposure	May cause damage to organs (central nervous system, kidneys, liver) through prolonged or repeated exposure.
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Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: 0.74 mm²/s (20 °C)
Likely routes of exposure	: Inhalation. Skin and eye contact.
Potential Adverse human health effects and symptoms	: Practically non-toxic if swallowed (LD50 oral, rat > 2000 mg/kg). Causes skin irritation. Harmful in contact with skin. Harmful if inhaled. Caution! Substance is absorbed through the skin.
Symptoms/effects after inhalation	: EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Central nervous system depression. Dizziness. Headache. Coordination disorders. Disturbed motor response. Impaired memory. Disturbances of consciousness.
Symptoms/effects after skin contact	: Tingling/irritation of the skin.
Symptoms/effects after eye contact	: No effects known.
Symptoms/effects after ingestion	: AFTER ABSORPTION OF LARGE QUANTITIES: Enlargement/disease of the liver. Symptoms similar to those listed under inhalation.
Chronic symptoms	: Dry skin. Itching.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.
Ecology - air	: Not included in the list of substances which may contribute to the greenhouse effect (IPCC). Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Photolysis in the air. Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Toxic to crustacea (Daphnia). Toxic to fishes. Groundwater pollutant. Fouling to shoreline. No inhibition of activated sludge. Toxic to algae.

Xylenes, ACS (1330-20-7)

LC50 fish 1	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
ErC50 (algae)	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

Xylenes (1330-20-7)

LC50 fish 1	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
ErC50 (algae)	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

ethylbenzene (100-41-4)

LC50 fish 1	5.1 mg/l (ASTM, 96 h, Menidia menidia, Flow-through system, Salt water, Experimental value, Lethal)
EC50 Daphnia 1	1.8 – 2.4 mg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

cumene (98-82-8)

LC50 fish 1	4.8 mg/l (EPA OTS 797.1400, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	2.14 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 (algae)	2.01 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Xylenes, ACS (1330-20-7)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
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Xylenes (1330-20-7)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
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ethylbenzene (100-41-4)

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.44 g O □/g substance
Chemical oxygen demand (COD)	2.1 g O □/g substance
ThOD	3.17 g O □/g substance

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cumene (98-82-8)

Persistence and degradability	Not readily biodegradable in water.	
Biochemical oxygen demand (BOD)	1.28 g O	□/g substance
Chemical oxygen demand (COD)	2.42 g O	□/g substance
ThOD	3.2 g O	□/g substance

12.3. Bioaccumulative potential

Xylenes, ACS (1330-20-7)

BCF fish 1	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)	
Log Pow	3.2 (Read-across, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

Xylenes (1330-20-7)

BCF fish 1	7.2 – 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)	
Log Pow	3.2 (Read-across, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

ethylbenzene (100-41-4)

BCF fish 1	1 (6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)	
Log Pow	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

cumene (98-82-8)

BCF other aquatic organisms 1	94.69 l/kg (BCFBAF v3.00, Calculated value)	
Log Pow	3.55 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 23 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

12.4. Mobility in soil

Xylenes, ACS (1330-20-7)

Surface tension	28.01 – 29.76 mN/m (25 °C)	
Log Koc	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)	
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.	

Xylenes (1330-20-7)

Surface tension	28.01 – 29.76 mN/m (25 °C)	
Log Koc	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)	
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.	

ethylbenzene (100-41-4)

Surface tension	71.2 mN/m (23 °C, 0.058 g/l, EU Method A.5: Surface tension)	
Log Koc	2.71 (log Koc, PCKOCWIN v1.66, QSAR)	

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ethylbenzene (100-41-4)

Ecology - soil	Low potential for adsorption in soil. Toxic to soil organisms.
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cumene (98-82-8)

Surface tension	28.2 mN/m (20 °C)
Log Koc	2.946 (log Koc, Calculated value)
Ecology - soil	Low potential for adsorption in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations	: Do not discharge into drains or the environment. Dispose of at authorized waste collection point. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.
Additional information	: Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

SECTION 14: Transport information

14.1. UN number

DOT NA No : UN1307

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Xylenes

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 3
Hazard labels (DOT)	: 3

14.4. Packing group

Packing group (DOT) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1307

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DOT Special Provisions (49 CFR 172.102)	: B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Xylenes, ACS (1330-20-7)

Subject to reporting requirements of United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Skin corrosion or Irritation Health hazard - Acute toxicity (any route of exposure) Health hazard - Aspiration hazard Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Serious eye damage or eye irritation

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Xylenes	CAS-No. 1330-20-7	65 – 100%
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Xylenes (1330-20-7)

RQ (Reportable quantity, section 304 of EPA's List of Lists)	100 lb
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Xylenes (1330-20-7)

SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids) Health hazard - Skin corrosion or Irritation Health hazard - Acute toxicity (any route of exposure) Health hazard - Aspiration hazard Health hazard - Specific target organ toxicity (single or repeated exposure) Health hazard - Serious eye damage or eye irritation
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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

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

Revision date : 09/24/2021

Full text of H- and EUH-statements: see section 16

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard

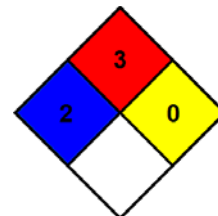
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

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Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : H - Splash goggles, Gloves, Synthetic apron, Vapor respirator

SDS US LabChem

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