

**Xylenes****16446-1L**

Version 1.2

Revision Date 01/09/2024

Print Date 01/10/2024

**SECTION 1. IDENTIFICATION**

Product name : Xylenes

Number : 000000020588

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.  
1953 South Harvey Street  
Muskegon, MI 49442

For more information call : 1-800-368-0050  
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or**  
: **+1-703-527-3887**  
:  
: (24 hours/day, 7 days/week)

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Form : liquid

Color : colourless

Odor : aromatic

**Classification of the substance or mixture**

Classification of the substance or mixture : Flammable liquids, Category 3  
Skin irritation, Category 2  
Eye irritation, Category 2A  
Carcinogenicity, Category 2  
Specific target organ toxicity - single exposure, Category 3,  
Respiratory system  
Specific target organ toxicity - repeated exposure, Category 2,  
Central nervous system, Liver, Kidney, Sensory organs

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Aspiration hazard, Category 1

## GHS Label elements, including precautionary statements

Symbol(s)

:



Signal word

: Danger

Hazard statements

: Flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

: **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat/ sparks/ open flames/ hot surfaces. 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.  
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**  
IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes.

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Remove contact lenses, if present and easy to do. Continue rinsing.  
IF exposed or concerned: Get medical advice/ attention.  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice/ attention.  
Take off contaminated clothing and wash before reuse.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
Keep cool.  
Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Carcinogenicity**

IARC: Ethylbenzene 100-41-4  
Group 2B: Possibly carcinogenic to humans

ACGIH: Ethylbenzene 100-41-4  
A3: Confirmed animal carcinogen

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula : C<sub>8</sub>H<sub>10</sub>

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Xylene (mixture of isomers)	1330-20-7	<=100.00 %
Ethylbenzene	100-41-4	<25.00 %

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**SECTION 4. FIRST AID MEASURES**

- General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.
- Inhalation : If breathed in, move person into fresh air. Call a physician immediately.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. Remove contact lenses. Call a physician immediately.
- Ingestion : When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.

**Notes to physician**

- Most important symptoms/effects, acute and delayed : No information available.
- Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : Flammable.  
Vapours may form explosive mixtures with air.  
Vapours are heavier than air and may spread along floors.  
Vapors may travel to areas away from work site before

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igniting/flashback to vapor source.

Fire may cause evolution of:  
carbon oxides (CO, CO<sub>2</sub>).

Special protective equipment for firefighters : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

Further information : Use water spray to cool unopened containers.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Wear personal protective equipment. Unprotected persons must be kept away.  
Ensure adequate ventilation.  
Remove all sources of ignition.

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Ventilate the area.  
Do not use sparking tools.  
Use explosion-proof equipment.  
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

**SECTION 7. HANDLING AND STORAGE****Handling**

Precautions for safe handling : Wear personal protective equipment.  
Use only in well-ventilated areas.  
Do not breathe vapours or spray mist.  
Do not get in eyes, on skin, or on clothing.

Advice on protection against fire and explosion : Keep product and empty container away from heat and sources of ignition.  
No smoking.

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Take precautionary measures against static discharges.  
Vapours may form explosive mixtures with air.

**Storage**

Conditions for safe storage, including any incompatibilities : Store in area designed for storage of flammable liquids. Protect from physical damage.  
Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Do not breathe vapours or spray mist.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety goggles

Hand protection : Impervious gloves  
Gloves must be inspected prior to use.  
Replace when worn.

Skin and body protection : Protective suit

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures : Take off all contaminated clothing immediately.  
Remove and wash contaminated clothing before re-use.  
Recommended preventive skin protection  
Wash hands before breaks and at the end of workday.  
When using, do not eat, drink or smoke.

**Exposure Guidelines**

Components	CAS-No.	Value	Control parameters	Update	Basis
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Xylene (mixture of isomers)	1330-20-7	STEL : Short term exposure limit	(150 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values, as amended
Xylene (mixture of isomers)	1330-20-7	TWA : Time weighted average	(100 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values, as amended
Xylene (mixture of isomers)	1330-20-7	TWA : Time weighted average	(20 ppm)	01 2021	ACGIHLIS_P:US. ACGIH Notice of Intended Changes (NIC) to Threshold Limit Values, as amended
Xylene (mixture of isomers)	1330-20-7	REL : Recomm ended exposure limit (REL):	435 mg/m3 (100 ppm)	2016	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Xylene (mixture of isomers)	1330-20-7	STEL : Short term exposure limit	655 mg/m3 (150 ppm)	2016	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Xylene (mixture of isomers)	1330-20-7	PEL : Permissi ble exposure limit	435 mg/m3 (100 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended

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Xylene (mixture of isomers)	1330-20-7	TWA : Time weighted average	435 mg/m3 (100 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Xylene (mixture of isomers)	1330-20-7	STEL : Short term exposure limit	655 mg/m3 (150 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ethylbenzene	100-41-4	TWA : Time weighted average	(20 ppm)	12 2010	ACGIH:US. ACGIH Threshold Limit Values, as amended
Ethylbenzene	100-41-4	TWA : Time weighted average	(20 ppm)	01 2021	ACGIHLIS_P:US. ACGIH Notice of Intended Changes (NIC) to Threshold Limit Values, as amended
Ethylbenzene	100-41-4	STEL : Short term exposure limit	545 mg/m3 (125 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Ethylbenzene	100-41-4	REL : Recomm ended exposure limit (REL):	435 mg/m3 (100 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended



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Ethylbenzene	100-41-4	PEL : Permissible exposure limit	435 mg/m3 (100 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
Ethylbenzene	100-41-4	TWA : Time weighted average	435 mg/m3 (100 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Ethylbenzene	100-41-4	STEL : Short term exposure limit	545 mg/m3 (125 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: liquid
Color	: colourless
Odor	: aromatic
Odor threshold	: Note: No data available
pH	: Note: Not applicable
Melting point/freezing point	: -34 °C
Boiling point/boiling range	: 136 - 140 °C
Flash point	: 77 °F (25 °C)
Evaporation rate	: Note: No data available

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Flammability	: Not applicable
Lower explosion limit	: 1.1 %(V)
Upper explosion limit	: 7 %(V)
Vapor pressure	: 5 - 10 hPa at 20 °C(68 °F)
Vapor density	: 3.66 Note: (Air = 1.0)
Density	: 0.87 g/cm3
Water solubility	: 0.2 g/l at 20 °C
Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: No data available
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, dynamic	: 0.61 mPa.s at 20 °C
Viscosity, kinematic	: 0.75 mm2/s at 25 °C
Molecular weight	: 106.17 g/mol

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Not classified as a reactivity hazard.
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Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur. Vapours may form explosive mixture with air.
Conditions to avoid	: Keep away from heat and sources of ignition.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Fire may cause evolution of: carbon oxides (CO, CO <sub>2</sub> ).

**SECTION 11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	: Acute toxicity estimate: 3,290 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate: > 40 mg/l , vapour Exposure time: 4 h Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate: 4,350 mg/kg Method: Calculation method
Skin irritation	: Result: Irritating to skin.
Eye irritation	: Result: Irritating to eyes.
Genotoxicity in vitro Xylene (mixture of isomers)	: Test Method: Ames test Metabolic activation: with and without metabolic activation Result: negative
Ethylbenzene	: Test Method: Ames test

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Metabolic activation: with and without metabolic activation  
Result: negative

: Cell type: Mouse lymphoma cells  
Result: positive

## Genotoxicity in vivo

Xylene (mixture of isomers)

: Species: Mouse  
Cell type: Micronucleus  
Application Route: Oral  
Result: negative

Ethylbenzene

: Species: Mouse  
Cell type: Micronucleus  
Application Route: Inhalation  
Result: negative

Aspiration toxicity

: Classification based on Annex VI of regulation 1272/2008/EC.

**SECTION 12. ECOLOGICAL INFORMATION**

## Toxicity to fish

Xylene (mixture of isomers)

: static test  
LC50: 26.7 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)

Ethylbenzene

: static test  
LC50: 4.2 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)  
Method: OECD Test Guideline 203

flow-through test

LC50: 12.1 mg/l  
Exposure time: 96 h  
Species: Pimephales promelas (fathead minnow)

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Toxicity to daphnia and other aquatic invertebrates

Ethylbenzene : static test  
EC50: 1.81 - 2.38 mg/l  
Exposure time: 48 h  
Species: Daphnia magna (Water flea)

Toxicity to algae

Ethylbenzene : Growth rate  
EC50: 3.6 mg/l  
Exposure time: 96 h  
Species: Pseudokirchneriella subcapitata (green algae)

**Elimination information (persistence and degradability)**

Biodegradability : Note: Inherently biodegradable.

**Further information on ecology**

Additional ecological information : Do not flush into surface water or sanitary sewer system.  
Harmful to aquatic life with long lasting effects.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

**SECTION 14. TRANSPORT INFORMATION**

**DOT** UN/ID No. : UN 1307  
Proper shipping name : XYLENES  
Class : 3  
Packing group : III  
Hazard Labels : 3

**IATA** UN/ID No. : UN 1307  
Description of the goods : XYLENES  
Class : 3  
Packaging group : III

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Hazard Labels : 3  
Packing instruction (cargo aircraft) : 366  
Packing instruction (passenger aircraft) : 355  
Packing instruction (passenger aircraft) : Y344

**IMDG** UN/ID No. : UN 1307  
Description of the goods : XYLENES  
Class : 3  
Packaging group : III  
Hazard Labels : 3  
EmS Number : F-E, S-D  
Marine pollutant : no

**SECTION 15. REGULATORY INFORMATION****Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : On the inventory, or in compliance with the inventory

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New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) : On the inventory, or in compliance with the inventory

**National regulatory information**

US. EPA CERCLA Hazardous Substances (40 CFR 302) : The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):

Reportable quantity: 100 lbs  
: Xylene (mixture of isomers) 1330-20-7  
:  
Reportable quantity: 1000 lbs  
: Ethylbenzene 100-41-4

**SARA 302 Components** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
: Xylene (mixture of isomers) 1330-20-7  
: Ethylbenzene 100-41-4

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard  
Chronic Health Hazard

**CERCLA Reportable Quantity** : 100 lbs

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## California Prop. 65

:



**WARNING:** This product can expose you to chemicals, listed below, known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Ethylbenzene

100-41-4

## Massachusetts RTK

:

: Ethylbenzene

100-41-4

: Xylene (mixture of isomers)

1330-20-7

## New Jersey RTK

:

: Xylene (mixture of isomers)

1330-20-7

: Ethylbenzene

100-41-4

## Pennsylvania RTK

:

: Xylene (mixture of isomers)

1330-20-7

: Ethylbenzene

100-41-4

## SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2*	2
Flammability	: 3	3
Physical Hazard	: 0	
Instability	:	0

\* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

## Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.



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