# *Safety Data Sheet*

*according to the (US) Hazard Communication Standard (29 CFR 1910.1200)*

| *Revision date: 27.03.2019* | *Version: 6.0* | *Print date: 27.03.2019* |
|---|---|---|

## SECTION 1: Identification

### Product identifier

| | |
|---|---|
| Trade name/designation: | Xylene |
| Product No.: | 89370-088 |
| Synonymes: | no data available |
| CAS No.: | not applicable |
| Other means of identification: | |

### Relevant identified uses of the substance or mixture and uses advised against

| | |
|---|---|
| Recommended Use: | For Further Manufacturing Use Only |
| Uses advised against: | Not for Human or Animal Drug Use |

### Details of the supplier of the safety data sheet

### Supplier

***VWR International LLC***

| | |
|---|---|
| Street | 100 Matsonford Road Radnor Corporate Center, Building One, Suite 200 P. O. Box 6660 |
| Postal code/city | Radnor, PA 19087 |
| Telephone | +1-800-932-5000 toll-free within US/Canada<br>+1-610-386-1700 |
| Telefax: | +1-610-728-2103 |

### Emergency phone number

Telephone +1-800-424-9300 (Chemtrec, 24 hrs/day, 7 days/week, USA)

### Preparation Information

VWR International - Product Information Compliance

E-mail sds@vwr.com

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910.1200 (OSHA HCS)

| Hazard classes and hazard categories | Hazard statements |
|---|---|
| Flammable liquid, category 3 | H226 |
| Specific target organ toxicity (repeated exposure), category 2 | H373 |
| Acute toxicity, category 4, dermal and inhalation | H312+H332 |
| Aspiration hazard, category 1 | H304 |
| Eye irritation, category 2 | H319 |
| Skin irritation, category 2 | H315 |
| Specific target organ toxicity (single exposure), category 3, vascular | H335 |
| Hazardous to the aquatic environment, chronic, category 3 | H412 |

### 2.2 Label elements

#### Labelling in accordance with 29 CFR 1910.1200 (OSHA HCS)

**Hazard pictograms**

**Signal word:** Danger

| Hazard statements | |
|---|---|
| H226 | Flammable liquid and vapor. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H312+H332 | Harmful in contact with skin or if inhaled. |
| H304 | May be fatal if swallowed and enters airways. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |

| Precautionary statements | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor/… |
| P331 | Do NOT induce vomiting. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P501 | Dispose of contents/container to … |

**Hazards not otherwise classified (HNOC)**
none/none

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

**Hazardous ingredients Classification according to the OSHA Hazard Communication Standard 29 CFR 1910.1200**

| Substance name | Concentration | Product identifier | Hazard classes and hazard categories |
|---|---|---|---|
| Xylene (mixture of isomers) | 75 - 85% | CAS No.: 1330-20-7 | Flam. Liq. 3 - H226<br>Acute Tox. 4 - H312+H332<br>Skin Irrit. 2 - H315 |
| Ethylbenzene | 15 - 25% | CAS No.: 100-41-4 | Flam. Liq. 2 - H225<br>STOT RE 2 - H373<br>Acute Tox. 4 - H332<br>Asp. Tox. 1 - H304 |

## SECTION 4: First aid measures

### 4.1 General information

IF exposed: Immediately call a POISON CENTER/doctor. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### After inhalation

Immediately call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

### In case of ingestion

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

### 4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

### 4.5 Information to physician

no data available

## SECTION 5: Fire fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**

Water spray
ABC-powder
Carbon dioxide (CO2)
Nitrogen

**Extinguishing media which must not be used for safety reasons**

no restriction

### 5.2 Specific hazards arising from the chemical

In case of fire may be liberated:
Pyrolysis products, toxic

### 5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives.
Protective equipment and precautions for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

### Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.
Do not inhale explosion and combustion gases.
Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.
Use water spray/stream to protect personnel and to cool endangered containers.
In case of fire: Evacuate area.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Use personal protection equipment. Special danger of slipping by leaking/spilling product. In case of major fire and large quantities: Remove persons to safety. Wear a self-contained breathing apparatus and chemical protective clothing.

### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated articles and floor according to the environmental legislation. Collect in closed and suitable containers for disposal.

### 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:
Inhalation
skin contact
Eye contact
Use extractor hood (laboratory).
If handled uncovered, arrangements with local exhaust ventilation have to be used.
If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

### 7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data available
Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

| Ingredient (Designation) | Regulatory information | Country | Limit value type (country of origin) | Limit value |
|---|---|---|---|---|
| Xylene (mixture of isomers) | NIOSH | US | LTV | 435 mg/m³ - 100 ppm |
| Xylene (mixture of isomers) | NIOSH | US | STV | 655 mg/m³ (1) - 150 ppm (1) |
| Xylene (mixture of isomers) | OSHA | US | LTV | 435 mg/m³ - 100 ppm |
| Ethylbenzene | NIOSH | US | LTV | 435 mg/m³ - 100 ppm |
| Ethylbenzene | NIOSH | US | STV | 545 mg/m³ (1) - 125 ppm (1) |
| Ethylbenzene | OSHA | US | LTV | 435 mg/m³ - 100 ppm |

### 8.2 Engineering controls

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Personal protection equipment (PPE)**
Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

*Eye/face protection*
Eye glasses with side protection

*Skin protection*
Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

| By short-term hand contact | |
|---|---|
| Suitable material: | Butyl caoutchouc (butyl rubber)/FKM (fluoro rubber) |
| Thickness of the glove material: | 0,70 mm |
| Breakthrough time (maximum wearing time): | > 480 min |

| By long-term hand contact | |
|---|---|
| Suitable material: | Butyl caoutchouc (butyl rubber)/FKM (fluoro rubber) |
| Thickness of the glove material: | 0,70 mm |
| Breakthrough time (maximum wearing time): | > 480 min |

*Respiratory protection*
Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

*Additional information*
Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

*Environmental exposure controls*
no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| (a) Appearance | |
| Physical state: | liquid |
| Color: | colorless |
| (b) Odour: | characteristic |
| (c) Odour threshold: | 1 ppm |

### Safety relevant basic data

| | |
|---|---|
| (d) pH: | no data available |
| (e) Melting point/freezing point: | -34 °C |
| (f) Initial boiling point and boiling range: | 137-140 °C |
| (g) Flash point: | 22.8 °C |
| (h) Evaporation rate: | no data available |
| (i) Flammability (solid, gas): | Flammable liquid and vapor. |
| (j) Flammability or explosive limits | |
| Lower explosion limit: | no data available |
| Upper explosion limit: | no data available |
| (k) Vapour pressure: | 8.29 mmHg (25 °C) |
| (l) Vapour density: | 3.66 |
| (m) Relative density: | 0.865 g/cm³ |
| (n) Solubility(ies) | |
| Water solubility (g/L): | no data available |
| Soluble (g/L) in Ethanol: | no data available |
| (o) Partition coefficient: n-octanol/water: | no data available |
| (p) Auto-ignition temperature: | 527 °C |
| (q) Decomposition temperature: | no data available |
| (r) Viscosity | |
| Kinematic viscosity: | no data available |
| Dynamic viscosity: | no data available |
| (s) Explosive properties: | not applicable |
| (t) Oxidising properties: | not applicable |

### 9.2 Other information

| | |
|---|---|
| Bulk density: | no data available |
| Refraction index: | no data available |
| Dissociation constant: | no data available |
| Surface tension: | no data available |
| Henry's Law Constant: | no data available |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

### 10.7 Additional information

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute effects**

*Acute oral toxicity*:

Xylene (mixture of isomers) - LD50: > 2840 mg/kg - Rat - (Merck KGaA)

Ethylbenzene - LD50: > 3500 mg/kg - Rat - (IUCLID)

*Acute dermal toxicity*:

Xylene (mixture of isomers) - LD50: < 4350 mg/kg - Rabbit - (IUCLID)

Ethylbenzene - LD50: > 15354 mg/kg - Rabbit - (IUCLID)

*Acute inhalation toxicity*:

Xylene (mixture of isomers) - LC50: 29.08 mg/l - Rat - (Japan GHS Basis for Classification Data)

Ethylbenzene - LC50: 17.2 mg/l - Rat - (IUCLID)

**Irritant and corrosive effects**

*Primary irritation to the skin:*

Causes skin irritation.

*Irritation to eyes:*

Causes serious eye irritation.

*Irritation to respiratory tract:*

May cause respiratory irritation.

**Respiratory or skin sensitization**
In case of skin contact: not sensitising
After inhalation: not sensitising

**STOT-single exposure**
May cause respiratory irritation.

**STOT-repeated exposure**
May cause damage to organs through prolonged or repeated exposure.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
**Carcinogenicity**
The table below indicates whether each agency has listed any ingredient as a carcinogen.

| no data available | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| | | | | |

**Germ cell mutagenicity**
No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**
No indications of human reproductive toxicity exist.

**Aspiration hazard**
May be fatal if swallowed and enters airways.

**Other adverse effects**
no data available

**Additional information**
no data available

## SECTION 12: Ecological information

### 12.1 Ecotoxicity

**Fish toxicity:**
Xylene (mixture of isomers) - LC50: 15.7 mg/l (96 h) - R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212

Xylene (mixture of isomers) - LC50: 15.7 mg/l (96 h) - R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212

**Daphnia toxicity**:
Xylene (mixture of isomers) - LC50: 8.5 mg/l (48 h) - Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. Estuar.Coast.Mar.Sci. 6(4):365-373

Xylene (mixture of isomers) - LC50: 8.5 mg/l (48 h) - Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. Estuar.Coast.Mar.Sci. 6(4):365-373

**Algae toxicity:**
no data available

**Bacteria toxicity:**
no data available

### 12.2 Persistence and degradability
no data available

### 12.3 Bioaccumulative potential
Partition coefficient: n-octanol/water: no data available

### 12.4 Mobility in soil:
no data available

### 12.5 Results of PBT/vPvB assessment
no data available

### 12.6 Other adverse effects
no data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Appropriate disposal / Product**
Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

**Appropriate disposal / Package**
Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

**Additional information**
no data available

## SECTION 14: Transport information

### Land transport (DOT)

| | |
|---|---|
| UN-No.: | UN1307 |
| Proper Shipping Name: | XYLENES |
| Class(es): | 3 |
| Hazard label(s): | 3 |
| Packing group: | III |
| Environmental hazards: | No |
| Marine pollutant: | No |

Special precautions for user:

## Sea transport (IMDG)

| | |
|---|---|
| UN-No.: | 1307 |
| Proper Shipping Name: | XYLENES |
| Class(es): | 3 |
| Classification code: | |
| Hazard label(s): | 3 |
| Packing group: | III |
| Environmental hazards: | No |
| Marine pollutant: | No |
| Special precautions for user: | |
| Segregation group: | - |
| EmS-No. | F-E S-D |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not relevant

## Air transport (ICAO-TI / IATA-DGR)

| | |
|---|---|
| UN-No.: | 1307 |
| Proper Shipping Name: | XYLENES |
| Class(es): | 3 |
| Classification code: | |
| Hazard label(s): | 3 |
| Packing group: | III |
| Special precautions for user: | |

# SECTION 15: Regulatory information

## Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA 313 Components**

- Xylene (mixture of isomers) - CAS No.: 1330-20-7
- Ethylbenzene - CAS No.: 100-41-4

**Massachusetts Right To Know Components**

- Xylene (mixture of isomers) - CAS No.: 1330-20-7
- Ethylbenzene - CAS No.: 100-41-4

**Pennsylvania Right To Know Components**

- Xylene (mixture of isomers) - CAS No.: 1330-20-7
- Ethylbenzene - CAS No.: 100-41-4

**New Jersey Right To Know Components**

- Xylene (mixture of isomers) - CAS No.: 1330-20-7
- Ethylbenzene - CAS No.: 100-41-4

**California Prop. 65 Components**

⚠ **WARNING:**
This product can expose you to chemicals including Ethylbenzene which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

## SECTION 16: Other information

**Abbreviations and acronyms**

ACGIH - American Conference of Governmental Industrial Hygiensts
DOT - Department of Transportation
IARC - International Agency for Research on Cancer
IATA-DGR - International Air Transport Association-Dangerous Goods Regulations
ICAO-TI - International Civil Aviation Organization-Technical Instructions
IMDG - International Maritime Code for Dangerous Goods
LTV - Long Term Value
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety & Health Administration
PBT - Persistent, Bioaccumulative and Toxic
PEL - Permissible Exposure Limit
STV - Short Term Value
SVHC - Substances of Very High Concern
TDG - Transport of Dangerous Goods
TLV - Threshold Limit Value
vPvB - very Persistent, very Bioaccumulative

**Additional information**

Indication of changes: none/none

*The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safty precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.*