

SAFETY DATA SHEET

Xylene – Item no. 60-058

according to 1907/2006/EC, Article 31



Date: 28/02/2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier

- Trade name Xylol

- Article number: 1000453900001

- CAS Number:

1330-20-7

- EC number:

215-535-7

- Index number:

601-022-00-9

- 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- Application of the substance / the preparation Solvents

- 1.3 Company / undertaking identification

Manufacturer, importer, other undertaking

UCY business services & trading GmbH

Contact information:

Street address: Am Villepohl 4

Postcode and post office: DE-53347 Alfter

Telephone number: +49 228 2428 732

Facsimile: +49 228 2428 731

E-mail address: sales@ucy-energy.com

- 1.4. Emergency telephone

Telephone number, name and address

+49 163 8141789

UCY business services & trading GmbH

Am Villepohl 4, DE-53347 Alfter

In case of intoxication (consultation in German and English)

Poisoning emergency number (Berlin)

Tel. +49 (0) 30 30686 790

Emergency telephone number (consultation in German and English)

Poisoning emergency number (Berlin)

Tel. +49 (0) 30 19240

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 3 H226 Flammable liquid and vapour.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

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Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.

Xi; Irritant

R38: Irritating to skin.

R10: Flammable.

- Information concerning particular hazards for human and environment:

Human health hazards: Aspiration into lungs may cause chemical pneumonitis which can be fatal. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Safety hazards: Combustible. Electronic charges may be generated during handling. May form flammable/explosive vapour-air mixture.

Environmental hazards: Not classified as dangerous under EC-criteria

- 2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS02 GHS07 GHS08

- Signal word Danger

- Hazard statements

H226 Flammable liquid and vapour.

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 through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

- Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P243 Take precautionary measures against static discharge.

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.

P331 Do NOT induce vomiting.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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- *Additional information: Void*
- **2.3 Other hazards**
- *Results of PBT and vPvB assessment*
- *PBT: Not applicable.*
- *vPvB: Not applicable.*

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
Xylol mixture of isomers
(1,2-, 1,3- and 1,4-dimethyl benzene and ethyl benzene. Content of benzene: max 0,01 %)
- **CAS No. Designation:**
1330-20-7 Xylene, mixed isomers, pure
100-41-4 Ethylbenzene
- **Identification no(s):**
- **EC number:** 215-535-7
- **Index number:** 601-022-00-9

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General advice:**
Take affected persons out of danger area and instruct to lie down.
Take affected persons into the open air.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Instantly remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation**
Provide fresh-air circulation. If symptoms continue, consult a doctor. In case of respiratory failure or breathing irregularities, commence resuscitation or oxygen inhalation and immediately consult a doctor. In case of unconsciousness, place und transport the patient in a recovery position.
- **After skin contact**
Remove contaminated clothing immediately. Wash affected areas with plenty of water und soap. If irritation continues, contact a doctor.
- **After eye contact** *Rinse immediately opened eye for several minutes under running water. Then consult doctor.*
- **After swallowing**
Do not provoke vomiting. Vomiting while unconscious, may cause aspiration and may lead to suffocation. Give plenty of water to drink, but only if the patient is fully conscious. Contact a doctor.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
- **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Information for doctor**
Renew lipid coating of the skin in order to protect against dermatitis.
Cleaning of the stomach should only be carried out with endotracheal intubation. Danger of aspiration.
Symptomatic treatment.
- **Danger**
Danger of pneumonia.
Danger of disturbed cardiac rhythm (cardiac sensitisation, particularly in abuse situations).
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
 - **For safety reasons unsuitable extinguishing agents** *Water with a full water jet.*
- **5.2 Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures. In case of incomplete combustion carbon monoxide can arise. Fumes are heavier than air and distributed over ground. Inflammation is possible from a far distance. Avoid contact with combustible substances
hazard determining flue gases: carbon monoxide, soot.
organic decomposition products
Do not inhale explosion and combustion gases.
- **5.3 Advice for firefighters**
 - **Protective equipment:** *Wear full protective suit with self-contained breathing apparatus.*
- **Additional information**
Endangered containers in the surrounding area should be cooled with a water-hose.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment and keep unprotected persons away.
Extinguish naked flames. Remove flammable sources. No smoking. Avoid sparks. Avoid contact with skin, eyes and clothing. Avoid inhalation of fumes. Air contaminated rooms thoroughly. Protect against electrostatic sparks.
- **6.2 Environmental precautions:**
Prevent material from reaching sewage system, holes and cellars.
Prevent from spreading (e.g. by damming-in or oil barriers).
If large amounts are released, the authorities must be informed.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep containers tightly sealed.
Ensure good ventilation/exhaustion at the workplace. Avoid repeated or long-term skin contact.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Use only in explosion-proof area.
Use explosion-proof apparatus / fittings and spark-proof tools.
Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

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SECTION 8: Exposure controls/personal protection

- Additional information about design of technical systems:

Room ventilation i.e. vacuum suction. Measures to be taken against electro-static sparks.

- 8.1 Control parameters

- Components with critical values that require monitoring at the workplace:

1330-20-7 xylene, mixed isomers, pure (50-100%)

WEL Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

- DNELs

Oral	DNEL (population)	1.6 mg/kg bw/day (Long-term - systemic effects)
Dermal	DNEL (population)	108 mg/kg bw/day (Long-term - systemic effects)
	DNEL (worker)	180 mg/kg bw/day (Long-term - systemic effects)
Inhalative	DNEL (population)	14.8 mg/m ³ (Long-term - systemic effects)
		174 mg/m ³ (Acute - systemic and local effects)
	DNEL (worker)	77 mg/m ³ (Long-term - systemic effects)
		289 mg/m ³ (Acute - systemic and local effects)

- PNECs

Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

- Additional information: The lists that were valid during the compilation were used as basis.

- 8.2 Exposure controls

- Personal protective equipment

- General protective and hygienic measures

Keep away from food, beverages and fodder.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Gases, fumes and aerosols should not be inhaled.

- Breathing equipment:

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Short term: filter A2

- Protection of hands: Solvent resistant gloves

- Material of gloves

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

Material of gloves is recommended for a short-term single use to protect from splashes. For permanent usage contact manufacturer of gloves.

- Eye protection: Tightly sealed safety glasses.

- Body protection:

Standard protective working clothes, chemical resistant safety-shoes or wellingtons. If skin contact is possible, wear impenetrable protective clothing.

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SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties	
- General Information	
- Appearance:	
Form:	Fluid
Colour:	Colourless
- Smell:	aromatic
- pH-value:	not applicable
- Change in condition	
Melting point/Melting range:	< -25 °C
Boiling point/Boiling range:	136-145 °C
- Flash point:	25 °C (IP 170(Abel))
- Ignition temperature:	460 °C
- Danger of explosion:	Product is not explosive. However, formation of explosive air/steam mixtures is possible.
- Critical values for explosion:	
Lower:	1.0 Vol %
Upper:	7.0 Vol %
- Vapour pressure at 20 °C:	ca. 10 hPa
- Density at 15 °C	ca. 0.87 g/cm ³
- Solubility in / Miscibility with	
Water at 20 °C:	0.175 g/l
- Partition coefficient (n-octanol/water):	3.12-3.20 log POW
- Viscosity:	
dynamic at 20 °C:	0.61 mPas
kinematic at 20 °C:	ca. 0.9 mm ² /s
- 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
Can be distilled without decomposing at normal pressure.
To avoid: heat, flames, sparks.
- 10.3 Possibility of hazardous reactions Violent reaction with strong oxidizing agents.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: Strong acids and oxidizing agents.
- 10.6 Hazardous decomposition products:
Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions.
Formation of carbon monoxide and carbon dioxide in case of fire.

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SECTION 11: Toxicological information

- 11.1 Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

Oral	LD50	8700 mg/kg (rat)
Dermal	LD50	2000 mg/kg (r/bt)
Inhalative	LC 50 / 4 h	10-20 mg/l (rat)

- Primary irritant effect:

- on the skin:

Irritant for skin and mucous membranes.

The product has a strong degreasing effect on the skin.

- on the eye: Irritant effect.

- Sensitization: No sensitizing effect known.

- Other information (about experimental toxicology):

Aspiration hazard : Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Mutagenicity : Not mutagenic.

Carcinogenicity : An increased tumour incidence has been observed in experimental animals; the significance of this finding to man is unknown. (Ethylbenzene)

Reproductive and Developmental Toxicity: Does not impair fertility. Not expected to be a developmental toxicant.

Specific target organ toxicity - single exposure: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death. Inhalation of vapours or mists may cause irritation to the respiratory system.

Specific target organ toxicity - repeated exposure: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Auditory system: prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss.

Additional Information : Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

- Subacute to chronic toxicity:

- Aspiration hazard:

May be fatal if swallowed and enters airways. Based on physical and chemical properties of the product.

- Additional toxicological information:

Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Aspiration into the lungs may cause chemical pneumonitis which can be fatal.

Vapours in higher concentration have an irritating effect on the upper respiratory tract. Very high concentrations may cause dizziness, headaches and unconsciousness.

SECTION 12: Ecological information

- 12.1 Toxicity

- Aquatic toxicity:

EC 50 / 48 h	1-10 mg/l (Aquatic invertebrates)
LC 50 / 72 h	1-10 mg/l (Algae)
	2-8 mg/l (Selastrum capricornutum)
LC 50 / 96 h	86 mg/l (Leuciscus idus)
	1-10 mg/l (Fish)

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- **12.2 Persistence and degradability**
Readily biodegradable.
Oxidises rapidly by photo-chemical reactions in air.
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:**
Danger to drinking water if even small quantities leak into soil.
Water hazard class 2 (Assessment by list): hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **12.6 Other adverse effects** *No further relevant information available.*

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Must be specially treated under adherence to official regulations.
Contact manufacturer for recycling information.
- **Waste disposal key number:**
Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.
- **Uncleaned packagings:** *Disposal must be made according to official regulations.*
- **Recommendation:**
Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning. Care should be taken that no other materials get into the packaging.
Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.
Caution: Leftovers in the containers may cause the risk of explosion.
Uncleaned containers should not be perforated, cut or welded.

SECTION 14: Transport information

- 14.1 UN-Number	
- ADR, IMDG, IATA	1307
- 14.2 UN proper shipping name	
- ADR	1307 XYLENES
- IMDG, IATA	XYLENES
- 14.3 Transport hazard class(es)	
- ADR	
- Class	3 (F1) Flammable liquids.
- Label	3

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- IMDG, IATA	
- Class	3 Flammable liquids.
- Label	3
- 14.4 Packing group	
-ADR, IMDG, IATA	III
- 14.5 Environmental hazards:	
- Marine pollutant:	no
- 14.6 Special precautions for user	Warning: Flammable liquids.
- Kemler Number:	30
- EMS Number:	F-E,S-D
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
- UN "Model Regulation":	UN1307, XYLENES, 3, III

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
- Decree to be applied in case of technical fault: Material group 3 (flammable liquids) mixing-swell to be observed
- Technical instructions (air):

Class	Share in %
NK	50-100

- VOC 100 % volatile organic compounds (Council Directive 2010/75/EC).
- Water hazard class: Water hazard class 2 (Assessment by list): hazardous for water.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing data specification sheet: see item 1: Informing department
- Contact:

Frau Serpil Ademoglu
Herr Joachim Wiebusch
Herr G. März

- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
LEV: Local Exhaust Ventilation
RPE: Respiratory Protective Equipment
RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association

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*GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent*

*- * Data compared to the previous version altered.*

Further information:

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