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

- **1.1 Product identifier**
  - Trade name: xylene, mixture of isomers
  - Article number: 2425
  - CAS Number: 1330-20-7
  - EC number: 215-535-7
  - Index number: 601-022-00-9
  - Registration number 01-2119484621-37-XXXX

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - Only for the use of professionals users
  - Life cycle stages
    - IS Use at industrial Sites
    - F Formulation or re-packing
    - PW Widespread use by professional workers
  - Sector of Use
    - SU8 Manufacture of bulk, large scale chemicals (including petroleum products)
    - SU9 Manufacture of fine chemicals
  - Process category
    - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
    - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
    - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
    - PROC4 Chemical production where opportunity for exposure arises
    - PROC5 Mixing or blending in batch processes
    - PROC7 Industrial spraying
    - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
    - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
    - PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
    - PROC10 Roller application or brushing
    - PROC11 Non industrial spraying
    - PROC13 Treatment of articles by dipping and pouring
    - PROC14 Tabletting, compression, extrusion, pelletisation, granulation
    - PROC15 Use as laboratory reagent
    - PROC19 Manual activities involving hand contact
    - PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles
  - Environmental release category
    - ERC1 Manufacture of the substance
    - ERC2 Formulation into mixture
    - ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
    - ERC7 Use of functional fluid at industrial site
    - ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
    - ERC8c Widespread use leading to inclusion into/onto article (indoor)
    - ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
    - ERC8f Widespread use leading to inclusion into/onto article (outdoor)
  - Application of the substance / the mixture
    - Chemical for research, development, manufacturing, laboratory chemical for analysis.

(Contd. on page 2)
Trade name: xylene, mixture of isomers

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Biosolve Chimie
20 Rue Roger Husson, 57260 Dieuze, France
Tel: +33 3 878 675 80/81/82/83/84/85
Email: info@biosolvechimie.com

Biosolve B.V.
Leenderweg 78, 5555 CE Valkenswaard, the Netherlands.
Tel: +31-(0)40-2071300
Fax:+31-(0)40-2048537
Email: info@biosolve-chemicals.com

Further information obtainable from: Product safety department.

1.4 Emergency telephone number:
For emergency telephone numbers of the poisons centers in Europe please use this link: http://www.eapcct.org/

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS02 flame
Flam. Liq. 3 H226 Flammable liquid and vapour.

GHS07
Acute Tox. 4 H312 Harmful in contact with skin.
Acute Tox. 4 H332 Harmful if inhaled.
Skin Irrit. 2 H315 Causes skin irritation.

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

Signal word Warning

Hazard statements
H226 Flammable liquid and vapour.
H312+H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
Trade name: xylene, mixture of isomers

- **Precautionary statements**
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
  - P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  - P280 Wear protective gloves/protective clothing/eye protection/face protection.
  - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
  - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

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**SECTION 3: Composition/information on ingredients**

- **3.1 Chemical characterisation: Substances**
  - CAS No. Description
    - 1330-20-7 xylene, mixture of isomers
  - Identification number(s)
    - EC number: 215-535-7
    - Index number: 601-022-00-9

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**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
  - General information:
    - Immediately 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:
    - Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
    - In case of unconsciousness place patient stably in side position for transportation.
  - After skin contact:
    - Immediately wash with water and soap and rinse thoroughly.
  - After eye contact:
    - Rinse opened eye for several minutes under running water.
  - After swallowing:
    - If symptoms persist consult doctor.

- **4.2 Most important symptoms and effects, both acute and delayed**
  - No further relevant information available.

- **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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  - For safety reasons unsuitable extinguishing agents: Water with full jet

- **5.2 Special hazards arising from the substance or mixture**
  - No further relevant information available.
5.3 Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
- 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
- Information about fire - and explosion protection:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
- 7.2 Conditions for safe storage, including any incompatibilities
  Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
  Ingredients with limit values that require monitoring at the workplace:
  1330-20-7 xylene, mixture of isomers
  | JOELV        | Short-term value: 442 mg/m³, 100 ppm |
  |             | Long-term value: 221 mg/m³, 50 ppm   |
  | Skin        |                                      |
  Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
  Personal protective equipment:
  General protective and hygienic measures:
  Keep away from foodstuffs, beverages and feed.
  Immediately remove all soiled and contaminated clothing
  Wash hands before breaks and at the end of work.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.04.2018
Revision: 22.02.2018

Trade name: xylene, mixture of isomers

Avoid contact with the skin.
Avoid contact with the eyes and skin.

Respiratory protection:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

![Protective gloves]

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves
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
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

![Tightly sealed goggles]

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
Form: Fluid
Colour: Colourless
Odour: Characteristic
Odour threshold: Not determined.

pH-value: Not determined.

Change in condition
Melting point/freezing point: -34 °C
Initial boiling point and boiling range: 137-143 °C

Flash point: 30 °C

Flammability (solid, gas): Not applicable.
Ignition temperature: 500 °C
Decomposition temperature: Not determined.
Auto-ignition temperature: Not determined.

(Contd. on page 6)
**Safety data sheet**
*according to 1907/2006/EC, Article 31*

**Trade name:** xylene, mixture of isomers

(Contd. of page 5)

<table>
<thead>
<tr>
<th>Explosive properties:</th>
<th>Product is not explosive. However, formation of explosive air/vapour mixtures are possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>1.1 Vol %</td>
</tr>
<tr>
<td>Upper:</td>
<td>7 Vol %</td>
</tr>
<tr>
<td><strong>Vapour pressure at 20 °C:</strong></td>
<td>6.7-8.2 hPa</td>
</tr>
<tr>
<td><strong>Density at 20 °C:</strong></td>
<td>0.87 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in/Miscibility with water at 20 °C:</strong></td>
<td>0.2 g/l</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic at 20 °C:</td>
<td>0.61 mPas</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>9.2 Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
  - Acute toxicity
    Harmful in contact with skin or if inhaled.
  - **LD/LC50 values relevant for classification:**
    | Route        | LD50  | LC50   |
    |--------------|-------|--------|
    | Oral         | 4,300 mg/kg (rat) |        |
    | Dermal       | 2,000 mg/kg (rabbit) |    |
    | Inhalative   | 11 mg/l (ATE)      |       |
- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.

(Contd. on page 7)
Trade name: xylene, mixture of isomers

- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
  - 12.2 Persistence and degradability No further relevant information available.
  - 12.3 Bioaccumulative potential No further relevant information available.
  - 12.4 Mobility in soil No further relevant information available.
  - Additional ecological information:
    - General notes:
      Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water
      Do not allow product to reach ground water, water course or sewage system.
      Danger to drinking water if even small quantities leak into the ground.
  - 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
  - Recommendation
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.

  - European waste catalogue
    | HP 3  | Flammable                  |
    | HP 4  | Irritant - skin irritation and eye damage |
    | HP 6  | Acute Toxicity             |

  - Uncleaned packaging:
    - Recommendation: Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- 14.1 UN-Number
  - ADR, IMDG, IATA UN1307

- 14.2 UN proper shipping name
  - ADR UN1307 XYLENES
  - IMDG, IATA XYLENES
Trade name: xylene, mixture of isomers

14.3 Transport hazard class(es)
- ADR
  - Class 3 (F1) Flammable liquids.
  - Label 3

14.4 Packing group
- ADR, IMDG, IATA
  - Packing group III

14.5 Environmental hazards:
- Marine pollutant: No

14.6 Special precautions for user
- Warning: Flammable liquids.
- Danger code (Kemler): 30
- EMS Number: 3-07
- Stowage Category A

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
- Not applicable.

Transport/Additional information:
- ADR
  - Limited quantities (LQ) 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
  - Transport category 3
  - Tunnel restriction code D/E

- IMDG
  - Limited quantities (LQ) 5L
  - Excepted quantities (EQ) Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

- UN "Model Regulation": UN 1307 XYLENES, 3, III
SECTION 15: Regulatory information

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

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms

GHS02  GHS07

Signal word: Warning

Hazard statements:
H226 Flammable liquid and vapour.
H312+H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.

Precautionary statements:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

Seveso category: P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements: 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements: 50,000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS: Product safety department

Contact: Product safety department

Abbreviations and acronyms:
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
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Trade name: xylene, mixture of isomers

Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2

* Data compared to the previous version altered.