Safety Data Sheet

Xylene

Version 1

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>1.1 Trade Name (as labeled):</th>
<th>Xylene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms:</td>
<td>N/A</td>
</tr>
<tr>
<td>CAS No:</td>
<td>Substance</td>
</tr>
</tbody>
</table>

| 1.2 Product Use:              | High strength solvent cleaner |

| 1.3 Company Name:             | SpecChem |
| Company Address:              | 1511 Baltimore Ave; Suite 600 |
| Company Address Cont:         | Kansas City, MO 64108 |
| Business Phone:               | (816) 968-5600 |
| Website:                      | www.specchemllc.com |

| 1.4 Emergency Telephone Number: | Chemtrec: (800) 424-9300 |
| Date of Last Revision:         | January 30, 2015 |
| Date of Current Revision:      | July 1, 2018 |

SECTION 2 – HAZARDS IDENTIFICATION

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:
- FLAMMABLE LIQUIDS - Category 3
- ACUTE TOXICITY: SKIN - Category 4
- ACUTE TOXICITY: INHALATION - Category 4
- SKIN CORROSION/IRRITATION - Category 2
- SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
- CARCINOGENICITY: INHALATION - Category 2
- SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3
- SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION [ears] - Category 2
- ASPIRATION HAZARD - Category 1

US DOT Symbols

EU and GHS Symbols

Signal Word Danger

Hazard Statements:
- Flammable liquid and vapor.
- Harmful in contact with skin or if inhaled.
- Causes serious eye irritation.
- Causes skin irritation.
- Suspected of causing cancer if inhaled.
May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled. (ears)

Precautionary Statements:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only nonsparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.

Response Statements:
Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage Statements:
Store locked up. Store in a well-ventilated place. Keep cool.

Disposal Statements:
Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredients</th>
<th>WT%</th>
<th>CAS No.</th>
</tr>
</thead>
</table>
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<table>
<thead>
<tr>
<th>Substance</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>60-100</td>
<td>1330-207</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>10-30</td>
<td>100-41-4</td>
</tr>
<tr>
<td>Cumene</td>
<td>0.1-1</td>
<td>98-82-8</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to process variation. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4 – FIRST AID MEASURES

4.1 Description of First Aid Measures:

**Eye Contact:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Skin Contact:** Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Ingestion:** Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute**

**Potential acute health effects**

- **Eye contact:** Causes serious eye irritation
- **Inhalation:** Harmful if inhaled. May cause respiratory irritation.
- **Skin contact:** Harmful in contact with skin. Causes skin irritation.
- **Ingestion:** May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.
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<table>
<thead>
<tr>
<th><strong>Over-exposure signs/symptoms</strong></th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>Adverse symptoms may include the following: pain or irritation, watering, redness</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>Adverse symptoms may include the following: respiratory tract irritation, coughing</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>Adverse symptoms may include the following: irritation, redness</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Adverse symptoms may include the following: nausea or vomiting</td>
</tr>
</tbody>
</table>

**Indication of immediate medical attention and special treatment needed, if necessary:**

**Notes to physician:** If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

**Specific treatments:** Treat symptomatically and supportively.

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**SECTION 5 – FIRE FIGHTING MEASURES**

**Specific hazards arising from the chemical:** Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Extinguishing media:**

**Suitable extinguishing Media:** Use dry chemical, CO₂, water spray (fog) or foam.

**Unsuitable extinguishing Media:** Do not use water jet.
Hazardous thermal decomposition products: Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide

Special protective actions for fire-fighters:
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters:
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal precautions, protective equipment and emergency procedures
For non-emergency Personnel:
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency Responders:
If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental Precautions:
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up
Small Spill:
Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spill:
Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material.
Precautions for Safe Handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.
Control Parameters:
Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>ACGIH TLV (United States, 4/2014). TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>ACGIH TLV (United States, 4/2014). TWA: 20 ppm 8 hours. OSHA PEL (United States, 2/2013). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

Appropriate engineering Controls:
Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental Exposure Controls:
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures
Hygiene measures:
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection:
Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used.
when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Chemical splash goggles. If inhalation hazards exist, a full-face respirator may be required instead.

**Skin Protection**

### Hand protection:
Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

### Body protection:
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Other skin protection:
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Respiratory protection:
Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on Basic Physical and Chemical Properties:

- **Appearance (Physical State and Color):** Clear liquid
- **Odor:** Sweet, pungent aromatic hydrocarbon.
- **Odor Threshold:** No data available
- **pH:** No data available
- **Melting/Freezing Point:** -48°C (-54.4°F)
- **Boiling Point:** 138°C (280.4°F)
- **Flash Point:** Closed cup: 27°C (80.6°F)
- **Evaporation Rate:** 0.8 (n-butyl acetate = 1)
- **Flammability (Solid; Gas):** Not applicable
- **Upper/Lower Flammability or Explosion Limits:** Lower: 1%, Upper: 7%
- **Vapor Pressure (mm Hg @ 20°C (68° F):** 0.93 kPa (7 mm Hg) [room temperature]
- **Vapor Density:** 3.7 [Air = 1]
- **Relative Density:** 0.87
- **Specific Gravity:** Estimated 31 @ 60 F
- **Solubility in Water:** Very slightly soluble in the following materials: cold water.
- **Weight per Gallon:** No data available
- **Partition Coefficient (n-octanol/water):** No data available
- **Auto-Ignition Temperature:** 432°C (809.6°F)
- **Decomposition Temperature:** No data available
- **Viscosity:** No data available
SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

10.2 Stability: Stable under conditions of normal storage and use.

10.3 Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

10.5 Incompatible Substances: Reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 – TOXICOLOGY INFORMATION

Information on Toxicological Effects:
Toxicity Data:

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>LC50 Inhalation Gas.</td>
<td>Cat</td>
<td>9500 ppm</td>
<td>2 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>5000 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>6700 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>6670 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Oral</td>
<td>Mouse</td>
<td>2119 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4300 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4300 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>&gt;5000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3500 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusion/Summary: Xylenes, mixed isomers: Effects from Acute Exposure:
ORAL (LD50), Acute: 4,300 mg/kg [Rat].
INHALATION (LC50), Acute: 4,550 ppm for four hours [Rat].
DERMAL (LD50), Acute: 14,100 uL/kg [Rabbit].

Overexposure to xylene may cause upper respiratory tract irritation, headache, cyanosis, blood serum changes, CNS damage and narcosis. Effects may be increased by the use of alcoholic beverages. Evidence of liver and kidney impairment were reported in workers recovering from a gross over-exposure.

Ethylbenzene: Effects from Acute Exposure:
ORAL (LD50), Acute: 3,500 mg/kg [Rat].
DERMAL (LD50), Acute: 17,800 uL/kg [Rabbit].
INTRAPERITONEAL (LD50), Acute: 2,624 mg/kg [Rat].

Effects from Prolonged or Repeated Exposure:
Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). Also, the incidence of tumors was elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as “possibly carcinogenic to humans” (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

**Irritation/Corrosion**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>Skin - Mild irritant</td>
<td>Rat</td>
<td>-</td>
<td>8 hours 60 microliters</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 Percent</td>
<td>-</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 15 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Skin: No additional information.
Eyes: **Xylenes, mixed isomers**: When splashed in the eyes, xylene may cause burning pain, conjunctivitis, corneal vacuolation, and keratitis.
Respiratory: No additional information.
Sensitization: No additional information.
Skin: No additional information.
Respiratory: No additional information.
Mutagenicity: Conclusion/Summary: No additional information.
Carcinogenicity: Conclusion/Summary: No additional information.
Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>-</td>
<td>2B</td>
<td>-</td>
</tr>
</tbody>
</table>

Reproductive toxicity: Conclusion/Summary: No additional information.
Teratogenicity: Conclusion/Summary: No additional information.
Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of Exposure</th>
<th>Target Organ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>3</td>
<td>Not applicable</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Cumene</td>
<td>3</td>
<td>Not applicable</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>
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Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of Exposure</th>
<th>Target Organ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>2</td>
<td>Inhalation</td>
<td>ears</td>
</tr>
</tbody>
</table>

Aspiration hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>ASPIRATION HAZARD - Category 1</td>
</tr>
</tbody>
</table>

Information on the likely Routes of exposure: Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye Contact: Causes serious eye irritation
Inhalation: Harmful if inhaled. May cause respiratory irritation.
Skin Contact: Harmful in contact with skin. Causes skin irritation.
Ingestion: May be fatal if swallowed and enters airways. Irritating to mouth, throat, and stomach

Symptoms related to the physical, chemical and toxicological characteristics

Eye Contact: Adverse symptoms may include the following:
- pain or irritation
- watering
- redness

Inhalation: Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

Skin Contact: Adverse symptoms may include the following:
- irritation
- redness

Ingestion: Adverse symptoms may include the following:
- nausea or vomiting

Potential chronic health effects

General: May cause damage to organs through prolonged or repeated exposure if inhaled.
Carcinogenicity: Suspected of causing cancer if inhaled. Risk of cancer depends on duration and level of exposure.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.
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## SECTION 12 – ECOLOGICAL INFORMATION

### Toxicity:

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>Acute EC50 90 mg/l Fresh water</td>
<td>Crustaceans - Cypris subglobosa</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 8.5 ppm Marine water</td>
<td>Crustaceans - Palaemonetes pugio – Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 8500 μg/l Marine water</td>
<td>Crustaceans - Palaemonetes Pugio</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 15700 μg/l Fresh water</td>
<td>Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 19000 μg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 13400 μg/l Fresh water</td>
<td>Fish - Carassius auratus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 16940 μg/l Fresh water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Acute EC50 4600 μg/l Fresh water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 3600 μg/l Fresh water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2930 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 5200 μg/l Marine water</td>
<td>Crustaceans - Americamysis Bahia</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 4200 μg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 1000 μg/l Fresh water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Conclusion/Summary:** Not available

### Persistence and Degradability

**Conclusion/Summary:** Not available

### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/Ingredient</th>
<th>LogPow</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>3.12</td>
<td>8.1 to 25.9</td>
<td>Low</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>3.6</td>
<td>-</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Mobility in soil

**Soil/water partition coefficient (Koc):** Not available

**Other adverse effects:** No known significant effects or critical hazards
### SECTION 13 – DISPOSAL CONSIDERATIONS

**13.1 Waste Treatment Methods:** Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Australia, EU Member States and Japan.

**13.2 EU Waste Code:** Not determined

### SECTION 14 - TRANSPORTATION INFORMATION

**14.1 U.S. Department of Transportation (DOT) Shipping Regulations:**

This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

- **UN Identification Number:** UN1307
- **Proper Shipping Name:** RQ, Xylenes, 3, UN 1307, PG II
- **Hazard Class Number and Description:** Class 3 – Flammable Liquid
- **Packing Group:** II
- **DOT Label(s) Required:** Flammable Liquid
- **North American Emergency Response Guidebook Number:** 128

**14.2 Environmental Hazards:**

- **Marine Pollutant:** The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

**14.3 Special Precaution for User:** None

**14.4 International Air Transport Association Shipping Information (IATA):**

This product is considered as dangerous goods.

**14.5 International Maritime Organization Shipping Information (IMO):**

- **UN Identification Number:** UN1307
- **Proper Shipping Name:** Flammable Liquid
- **Hazard Class Number and Description:** Class 3 – Flammable Liquids
- **Packing Group:** II
- **EMS-No:** N/A

### SECTION 15 – REGULATORY INFORMATION

**United States Regulations:**

- **United States inventory (TSCA 8b):** All components are listed or exempted.
- **Clean Water Act (CWA) 307:** Ethylbenzene; Toluene; Benzene
- **Clean Water Act (CWA) 311:** Xylene

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA’s National Response Center at (800) 424-8802.

**SARA 302/304**
**Safety Data Sheet**

**Xylene**

**Version 1**

**Composition/information on ingredients**
SARA 304 RQ: Not applicable

**SARA 311/312:**
Classification: Fire Hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

**Composition/information on ingredients:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Fire Hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cumene</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**SARA 313**

<table>
<thead>
<tr>
<th>Form R – Reporting requirements</th>
<th>Product Name</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes, mixed isomers</td>
<td>1330-20-7</td>
<td>&lt;90</td>
<td></td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>&lt;30</td>
<td></td>
</tr>
<tr>
<td>Supplier notification</td>
<td>Xylenes, mixed isomers</td>
<td>1330-20-7</td>
<td>&lt;90</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>100-41-4</td>
<td>&lt;30</td>
<td></td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State Regulations**
Massachusetts: The following components are listed: XYLENE
New York: The following components are listed: XYLENE (mixed)
New Jersey: The following components are listed: XYLENES; BENZENE, DIMETHYL
Pennsylvania: The following components are listed: BENZENE, DIMETHYL

**California Prop. 65**
**WARNING:** This product contains a chemical known to the State of California to cause cancer.
**WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>%</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylbenzene</td>
<td>&lt;30</td>
<td>Yes</td>
<td>No</td>
<td>41 μg/day (ingestion)</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>54 μg/day (inhalation)</td>
<td></td>
</tr>
<tr>
<td>Cumene</td>
<td>&lt;1</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Toluene</td>
<td>&lt;0.1</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>7000 μg/day (ingestion)</td>
</tr>
<tr>
<td>Benzene</td>
<td>&lt;0.1</td>
<td>Yes</td>
<td>Yes</td>
<td>6.4 μg/day (ingestion)</td>
<td>24 μg/day (ingestion)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13 μg/day (inhalation)</td>
<td>49 μg/day (inhalation)</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>&lt;0.0001</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Xylene

Version 1

International lists:  
**Australia inventory (AICS):** All components are listed or exempted.  
**China inventory (IECSC):** All components are listed or exempted.  
**Japan inventory:** All components are listed or exempted.  
**Korea inventory:** All components are listed or exempted.  
**Malaysia Inventory (EHS Register):** All components are listed or exempted.  
**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.  
**Philippines inventory (PICCS):** All components are listed or exempted.  
**Taiwan inventory (CSNN):** All components are listed or exempted.

**Canada inventory:** All components are listed or exempted.  
**EU Inventory:** All components are listed or exempted.  
**WHMIS (Canada):**  
- Class B-2: Flammable Liquid  
- Class D-2A: Material causing other toxic effects (very toxic)  
- Class D-2B: Material causing other toxic effect (toxic)

**SECTION 16 – OTHER INFORMATION**

Date of Printing: July 1, 2018

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. SpecChem assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, SpecChem assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

**END OF SDS SHEET**