



## MATERIAL SAFETY DATA SHEET

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**o-Xylene, 99%**

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MSDS Name:** o-Xylene, 99%

**Catalog Numbers:**

14099-0000, 14099-0010, 14099-0025

**Synonyms:**

1,2-Dimethylbenzene

**Company Identification (Europe): Acros Organics BVBA**

Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

**Company Identification (USA): Acros Organics**

One Reagent Lane  
Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For information in Europe, call: 0032(0) 14575211

For emergencies in the US, call CHEMTREC: 800-424-9300

For emergencies in Europe, call: 0032(0) 14575299

### SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

|               |   |             |
|---------------|---|-------------|
| CAS#          | : | 95-47-6     |
| Chemical Name | : | o-Xylene    |
| %             | : | 99%         |
| EINECS#       | : | 202-422-2   |
| Haz Symbols   | : | XN          |
| Risk Phrases  | : | 10 20/21 38 |

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Flammable. Harmful by inhalation and in contact with skin.

Irritating to skin.

#### Potential Health Effects

**Eye:**

Causes redness and pain. Causes severe eye irritation and possible injury.

**Skin:**

Harmful if absorbed through the skin. Exposure may cause irritation characterized by redness, dryness, and inflammation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. Substance is readily absorbed through the skin.

**Ingestion:**

Aspiration hazard. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Exposure may cause anemia and other blood

abnormalities. May cause effects similar to those of acute inhalation.

**Inhalation:**

Harmful if inhaled. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Inhalation of vapor may cause respiratory tract irritation. Irritation may lead to chemical pneumonitis and pulmonary edema. May cause vomiting, diarrhea, hemorrhage, labored breathing, weakness, unsteady gait, and coma.

**Chronic:**

Prolonged or repeated skin contact may cause defatting and dermatitis. May cause liver and kidney damage. Effects may be delayed. Narcotic in high concentrations.

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## SECTION 4 - FIRST AID MEASURES

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**Eyes:**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:**

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:**

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:**

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:**

Treat symptomatically and supportively.

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## SECTION 5 - FIRE FIGHTING MEASURES

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**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

**Extinguishing Media:**

Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water may be ineffective. Cool containers with flooding quantities of water until well after fire is out.

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## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Use water spray to reduce vapors, do not put water directly on leak, spill area or inside container.

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## SECTION 7 - HANDLING and STORAGE

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**Handling:**

Wash thoroughly after handling. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:**

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

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## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

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**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**Personal Protective Equipment**

**Eyes:**

Wear chemical goggles.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

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Physical State: Clear liquid  
Color: colorless  
Odor: aromatic odor  
pH: Not available.  
Vapor Pressure: 7mbar @20 deg C  
Viscosity: 0.81 mPa s @20 deg C  
Boiling Point: 143 - 145 deg C @760mmHg  
Freezing/Melting Point: -25 deg C  
Autoignition Temperature: 465 deg C ( 869.00 deg F)  
Flash Point: 31 deg C ( 87.80 deg F)  
Explosion Limits, lower: 1.7 Vol %  
Explosion Limits, upper: 7.6 Vol %  
Decomposition Temperature:  
Solubility in water: 0.2 g/l water (20°C)  
Specific Gravity/Density: 0.878  
Molecular Formula: C8H10  
Molecular Weight: 106.17

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## SECTION 10 - STABILITY AND REACTIVITY

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### Chemical Stability:

Stable.

### Conditions to Avoid:

High temperatures, incompatible materials, ignition sources.

### Incompatibilities with Other Materials:

Oxidizing agents, strong acids, coatings, plastics, rubber.

### Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

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### RTECS#:

CAS# 95-47-6: ZE2450000

### LD50/LC50:

CAS# 95-47-6: Inhalation, mouse: LC50 = 4595 ppm/6H; Oral, rat: LD50 = 3567 mg/kg.

Oral, rat: LD50 = 5000 mg/kg

### Carcinogenicity:

o-Xylene -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

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## SECTION 12 - ECOLOGICAL INFORMATION

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### Other

Biodegradable. Do not empty into drains.

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## SECTION 13 - DISPOSAL CONSIDERATIONS

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Dispose of in a manner consistent with federal, state, and local regulations.

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## SECTION 14 - TRANSPORT INFORMATION

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### IATA

Shipping Name: XYLENES

Hazard Class: 3

UN Number: 1307

Packing Group: III

### IMO

Shipping Name: XYLENES

Hazard Class: 3

UN Number: 1307

Packing Group: III

### RID/ADR

Shipping Name: XYLENES

Hazard Class: 3

UN Number: 1307

Packing group: III

USA RQ: CAS# 95-47-6: 1000 lb final RQ (Listed under Xylene, mixed); 454 kg final RQ (Listed under Xyl

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## SECTION 15 - REGULATORY INFORMATION

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### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 10 Flammable.

R 20/21 Harmful by inhalation and in contact with skin.

R 38 Irritating to skin.

Safety Phrases:

S 25 Avoid contact with eyes.

WGK (Water Danger/Protection)

CAS# 95-47-6: 2

### United Kingdom Occupational Exposure Limits

CAS# 95-47-6: OES-United Kingdom, TWA 50 ppm TWA; 220 mg/m<sup>3</sup> TWA

CAS# 95-47-6: OES-United Kingdom, STEL 100 ppm STEL; 441 mg/m<sup>3</sup> STEL

### United Kingdom Maximum Exposure Limits

### Canada

CAS# 95-47-6 is listed on Canada's DSL List.

CAS# 95-47-6 is listed on Canada's Ingredient Disclosure List.

### Exposure Limits

CAS# 95-47-6 (listed as \*\* undefined \*\*): OEL-ARAB Republic of Egypt: TWA 0.5 ppm (0.9 mg/m<sup>3</sup>)

OEL-AUSTRALIA: TWA 80 ppm (330 mg/m<sup>3</sup>); STEL 150 ppm (655 mg/m<sup>3</sup>)

OEL-BELGIUM: TWA 100 ppm (434 mg/m<sup>3</sup>); STEL 150 ppm (651 mg/m<sup>3</sup>)

OEL-CZECHOSLOVAKIA: TWA 200 mg/m<sup>3</sup>; STEL 1000 mg/m<sup>3</sup>

OEL-DENMARK: TWA 50 ppm (217 mg/m<sup>3</sup>); Skin

OEL-FINLAND: TWA 100 ppm (435 mg/m<sup>3</sup>); STEL 150 ppm; Skin

OEL-FRANCE:TWA 100 ppm (435 mg/m3);STEL 150 ppm (650 mg/m3)  
OEL-GERMANY:TWA 100 ppm (440 mg/m3)  
OEL-HUNGARY:TWA 100 mg/m3;STEL 300 mg/m3  
OEL-JAPAN:TWA 100 ppm (430 mg/m3)  
OEL-THE NETHERLANDS:TWA 100 ppm (435 mg/m3);Skin  
OEL-THE PHILIPPINES:TWA 0.1 mg/m3  
OEL-POLAND:TWA 100 mg/m3  
OEL-SWEDEN:TWA 50 ppm (200 mg/m3);STEL 100 ppm (450 mg/m3);Skin  
OEL-SWITZERLAND:TWA 100 ppm (436 mg/m3);STEL 200 ppm (870 mg/m3)  
OEL-THAILAND:TWA 100 ppm (435 mg/m3)  
OEL-TURKEY:TWA 100 ppm (435 mg/m3)  
OEL-UNITED KINGDOM:TWA 100 ppm (435 mg/m3);STEL 150 ppm;Skin  
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV  
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

#### **US FEDERAL**

##### **TSCA**

CAS# 95-47-6 is listed on the TSCA inventory.

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#### **SECTION 16 - ADDITIONAL INFORMATION**

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MSDS Creation Date: 1/04/2000 Revision #1 Date: 2/20/2004

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.