

	<p align="center"><b>LEONID CHEMICALS PVT. LTD., BANGALORE</b></p> <p align="center">An ISO-9001:2008 Certified Company</p> <p align="center">Quality Assurance Department</p>	<p>(CODE) DOCUMENT : WI (CODE) SECTION : WI/SM (DATE) : 01.04.2011</p>	 <p>Issue : 02 Rev.: 00</p>
<p>Title: MATERIAL SAFETY DATA SHEET (MSDS): XYLENE SULPHUR FREE</p>			<p>1   Page of 1</p>

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SECTION 1- COMPOUND NAME AND COMPANY INFORMATION  
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MSDS Name:

Xylene sulphur free

Catalog Numbers:

X003

Synonyms:

Unlisted

Company Information:

LEONID CHEMICALS Pvt Ltd,  
62/A-2, 1<sup>st</sup> Stage,  
Yeshvanthpur Industrial Suburb,  
Asoka puram School Road,  
Bangalore -22, Karnataka, INDIA  
Ph- +91-80-23378354  
Fax: +918023378354/23377126

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SECTION 2-COMPOSITION, INFORMATION ON INGREDIENTS  
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CAS#	:	1330-20-7
Chemical Name	:	Xylene
%	:	95%
EINECS#	:	215-535-7
Hazard Symbols	:	None Listed
Risk Phrases	:	None Listed

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SECTION 3 -HAZARDS IDENTIFICATION  
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EMERGENCY OVERVIEW

Not available.

Potential Health Effects

Eye:

Causes severe eye irritation.

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**Skin:** Exposure may cause irritation characterized by redness, dryness, and inflammation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. Skin absorption is slight.

**Ingestion:**

May cause central nervous system depression, kidney damage, and liver damage. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. Causes gastro intestinal irritation with nausea, vomiting and diarrhea.

**Inhalation:**

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. Prolonged exposure may result in dizziness and general weakness. Irritation may lead to chemical pneumonitis and pulmonary edema.

**Chronic:**

Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage.

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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:**

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Discard contaminated clothing in a manner which limits further exposure.

**Ingestion:**

Do not induce vomiting. If victim is conscious and alert, give 2-4cupfuls 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:**

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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. Vapors can travel to a source of ignition and flash back.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers.

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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. Remove all sources of ignition.

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**SECTION 7 -HANDLING AND STORAGE**  
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**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:**

Keep away from heat, sparks, and flame. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

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**SECTION 8 -EXPOSURE CONTROLS, PERSONAL PROTECTION**  
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**Engineering Controls:**

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Personal Protective Equipment**

**Eyes:**

Wear safety glasses and chemical goggles if splashing is possible.

**Skin:**

Wear appropriate gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to minimize contact with skin.

**Respirators :**

A NIOSH /MSHA approved or European Standard EN 149 air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected.

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**SECTION 9 -PHYSICAL AND CHEMICAL PROPERTIES**  
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Physical State : Liquid  
Color : Colorless liquid  
Odor : Aromatic odor  
pH : Not available.  
Vapor Pressure : 6.72 mm H g  
Viscosity : <32.6 SU S  
Boiling Point : 138.3 °C

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Freezing/Melting Point : -47.4°C  
Autoignition Temperature : 527°C (980.60 °F)  
Flash Point : 32°C ( 89.60 ° F)  
Explosion Limits, lower : 1.1  
Explosion Limits, upper : 6  
Decomposition Temperature : Not available.  
Solubility in water : Insoluble in water, soluble in alcohol  
Specific Gravity/Density : 0.864 g/mL  
Molecular Formula : C<sub>8</sub>H<sub>10</sub>  
Molecular Weight : 106.07

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**SECTION 10 -STABILITY AND REACTIVITY**  
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**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

High temperatures, incompatible materials, ignition sources.

**Incompatibilities with Other Materials:**

Strong acids, strong oxidizers and 1,3-dichloro-5,5-dimethyl-2,4-imidazolidindione (dichlorohydrantoin). Attacks some forms of plastics, rubber and coatings.

**Hazardous Decom position Products:**

Carbon monoxide, carbon dioxide.

**Hazardous Polymerization:**

Has not been reported.

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**SECTION 11-TOXICOLOGICAL INFORMATION**  
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**RTECS#:**

CAS# 1330-20-7: ZE2100000

**LD50/LC50:**

CAS# 1330-20-7: Draize test, rabbit, eye: 87 mg Mild; Draize test, rabbit, eye: 5 mg/24H Severe; Draize test, rabbit, skin: 100% Moderate; Draize test, rabbit, skin: 500 mg/24H Moderate; Inhalation, rat: LC50 = 5000 ppm/4H ; Oral, mouse: LD50 = 2119 mg/kg; Oral, rat: LD50 = 4300 mg/kg; Skin, rabbit: LD50 = >1700 mg/kg.

**Carcinogenicity:**

Xylene (o-, m-, p-isomers) -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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**Ecotoxicity:** Acute and long-term toxicity to fish and invertebrates: LD50 for gold fish is 13 mg/L/24 hr.

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### SECTION 13 -DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

### SECTION 14 -TRANSPORT INFORMATION

#### 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# 1330-20-7: 100 lb final RQ ; 45.4 kg final RQ

### SECTION 15-REGULATORY INFORMATION

#### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases: Not available.

#### Safety Phrases:

WGK (Water Danger/Protection)

CAS# 1330-20-7: 2

#### United Kingdom Occupational Exposure Limits

CAS# 1330-20-7:

OES-United Kingdom, TWA 50 ppm TWA;220 mg/m<sup>3</sup> TWA CAS# 1330-20-7:

OES-United Kingdom, STEL 100 ppm STEL;441 mg/m<sup>3</sup> STEL

#### United Kingdom Maxim um Exposure Lim its

#### Canada

CAS# 1330-20-7 is listed on Canada's DSL List.CAS# 1330-20-7 is not listed on Canada's Ingredient Disclosure List.



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**Exposure Limits**

CAS# 1330-20-7: 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:TW A 100 ppm (435 mg/m<sup>3</sup>);STEL 150 ppm (650 mg/m<sup>3</sup>)  
OEL-GERMANY:TWA 100 ppm (440 mg/m<sup>3</sup>)  
OEL-HUNGARY:TWA 100 mg/m<sup>3</sup>;STEL 300 mg/m<sup>3</sup>  
OEL-JAPAN:TWA 100 ppm (430 mg/m<sup>3</sup>)  
OEL-THE NETHERLANDS:TWA 100 ppm (435 mg/m<sup>3</sup>);Skin  
OEL-THE PHILIPPINES:TWA 0.1 mg/m<sup>3</sup>  
OEL-POLAND:TWA 100 mg/m<sup>3</sup>  
OEL-SW EDEN:TWA 50 ppm (200 mg/m<sup>3</sup>);STEL 100 ppm (450 mg/m<sup>3</sup>);Skin  
OEL-SW ITZERLAND:TWA 100 ppm (436 mg/m<sup>3</sup>);STEL 200 ppm (870 mg/m<sup>3</sup>)  
OEL-THAILAND:TW A 100 ppm (435 mg/m<sup>3</sup>)  
OEL-TURKEY:TW A 100 ppm (435 mg/m<sup>3</sup>)OEL-UNITED KINGDOM:TWA 100 ppm (435 mg/m<sup>3</sup>);STEL 150 ppm; Skin  
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLVOEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV  
US FEDERAL  
TSCACAS# 1330-20-7 is listed on the TSCA inventory.

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**SECTION 16 -ADDITIONAL INFORMATION**  
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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 event shall Leonid Chemicals Pvt. Ltd. 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, however arising, even if Leonid Chemicals Pvt. Ltd. has been advised of the possibility of such damages.

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		(CODE) SECTION : X003	
Title: SPECIFICATION MANUAL - XYLENE SULPHUR FREE			Issue : 02 Rev.: 00 1   Page of 1

### Specification manual - Xylene (Sulphur free)

**C<sub>8</sub>H<sub>10</sub>**  
**Product** : Xylene (Sulphur free)  
**Description** : Clear liquid  
**Cat No** : X003  
**Cas No** : 1330-20-7  
**Prepared Date** : 03.06.2010  
**Approved Date** : 03.06.2010

**MW: 106.17**

REVISION HISTORY				
Issue/Rev	Description of Change	Author	Effective Date	
01/00	Initial Release	S. Paul Joshua	03.06.2010	
02/00	Reviewed no changes	S. Paul Joshua	01.04.2011	
Next Review Due :	02.04.2015			
To be reviewed by :	Head-QC/QA			

Sl. No.	Tests	Specification
		LR
1	Boiling range	137-142°C
2	Sulphur compounds	0.0003%

Approved By: S.Paul Joshua, Head Quality Control and Quality Assurance