

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Pure Para-xylene  
Material : 1016976, 1016978, 1016977, 1029304, 1028381, 1028382

**Company** : Specialty Chemicals  
10001 Six Pines Drive  
The Woodlands, TX 77380

**Emergency telephone:****Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

**Transport:**

North America: CHEMTREC 800.424.9300 or 703.527.3887

Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group  
E-mail address : MSDS@CPChem.com  
Website : www.CPChem.com

**2. HAZARDS IDENTIFICATION****Emergency Overview****Danger****Form:** Liquid **Physical state:** Liquid **Color:** Clear

OSHA Hazards : Flammable Liquid, Moderate skin irritant, Moderate eye irritant,  
Carcinogen, Target Organ Effects

**GHS Classification**

: Flammable liquids, Category 3  
Acute toxicity, Category 5, Oral  
Skin irritation, Category 2  
Eye irritation, Category 2A  
Specific target organ systemic toxicity - single exposure,  
Category 3  
Specific target organ systemic toxicity - repeated exposure,  
Category 2, Inhalation, Auditory organs  
Aspiration hazard, Category 1  
Acute aquatic toxicity, Category 2

**GHS-Labeling**

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

Symbol(s)

:



Signal Word

:

Danger

Hazard Statements

:

H226: Flammable liquid and vapor.  
 H303: May be harmful if swallowed.  
 H304: May be fatal if swallowed and enters airways.  
 H315: Causes skin irritation.  
 H319: Causes serious eye irritation.  
 H335: May cause respiratory irritation.  
 H373: May cause damage to organs (Auditory organs) through prolonged or repeated exposure if inhaled.  
 H401: Toxic to aquatic life.

Precautionary Statements

:

**Prevention:**

P210: Keep away from heat/sparks/open flames/hot surfaces.  
 - No smoking.  
 P233: Keep container tightly closed.  
 P240: Ground/bond container and receiving equipment.  
 P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
 P242: Use only non-sparking tools.  
 P243: Take precautionary measures against static discharge.  
 P260: Do not breathe dust/fume/gas/mist/vapor/spray.  
 P264: Wash skin thoroughly after handling.  
 P271: Use only outdoors or in a well-ventilated area.  
 P273: Avoid release to the environment.  
 P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

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.  
 P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P314: Get medical advice/ attention if you feel unwell.  
 P321: Specific treatment (see supplemental first aid instructions on this label).  
 P331: Do NOT induce vomiting.  
 P332 + P313: If skin irritation occurs: Get medical advice/ attention.  
 P337 + P313: If eye irritation persists: Get medical advice/ attention.  
 P362: Take off contaminated clothing and wash before reuse.  
 P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.  
 P403 + P235: Store in a well-ventilated place. Keep cool.  
 P405: Store locked up.

**Disposal:**

P501: Dispose of contents/ container to an approved waste

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

disposal plant.

**Carcinogenicity:****IARC**

Group 2B: Possibly carcinogenic to humans

Ethylbenzene 100-41-4

**NTP**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**ACGIH**

Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

Ethylbenzene 100-41-4

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Benzene, 1,4-Dimethyl  
p-Xylene  
1,4-Dimethyl-benzene  
Xylene-p

Molecular formula : C<sub>8</sub>H<sub>10</sub>

Component	CAS-No.	Weight %
p-Xylene	106-42-3	99
Ethylbenzene	100-41-4	0 - 1
o-Xylene	95-47-6	0 - 1
m-xylene	108-38-3	0 - 1

**4. FIRST AID MEASURES**

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Symptoms of poisoning may only appear several hours later. Do not leave the victim unattended.

If inhaled : Move to fresh air. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Do NOT induce vomiting. Do not

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.

**5. FIRE-FIGHTING MEASURES**

Flash point	: 27 °C (81 °F) Method: closed cup
Autoignition temperature	: 528 °C (982 °F)
Suitable extinguishing media	: Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Alcohol-resistant foam.
Unsuitable extinguishing media	: High volume water jet.
Specific hazards during fire fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment for fire-fighters	: Wear self contained breathing apparatus for fire fighting if necessary.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Fire and explosion protection	: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.
Hazardous decomposition products	: Carbon oxides.

**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions	: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up	: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**7. HANDLING AND STORAGE****Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient. Review all operations, which have the potential to generating and accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106 "Flammable and Combustible Liquids"; National Fire Protection Association (NFPA 77), "Recommended Practice on Static Electricity"; and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and stray Currents".

Advice on protection against fire and explosion : Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition.

**Storage**

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Ingredients with workplace control parameters**

US

Ingredients	Basis	Value	Control parameters	Note
p-Xylene	ACGIH	TWA	100 ppm,	BEI, A4,
	ACGIH	STEL	150 ppm,	BEI, A4,
o-Xylene	ACGIH	TWA	100 ppm,	BEI, A4,
	ACGIH	STEL	150 ppm,	BEI, A4,
m-xylene	NIOSH REL	TWA	100 ppm, 435 mg/m3	
	NIOSH REL	ST	150 ppm, 655 mg/m3	
	ACGIH	TWA	100 ppm,	BEI, A4,
	ACGIH	STEL	150 ppm,	BEI, A4,
	NIOSH REL	TWA	100 ppm, 435 mg/m3	
	NIOSH REL	ST	150 ppm, 655 mg/m3	

MSDS Number:100000067427

5/16

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

Ethylbenzene	ACGIH	TWA	100 ppm,	( ), BEI, A3,
	ACGIH	STEL	125 ppm,	( ), BEI, A3,
	OSHA Z-1	TWA	100 ppm, 435 mg/m3	(b),
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	125 ppm, 545 mg/m3	
	NIOSH REL	TWA	100 ppm, 435 mg/m3	
	NIOSH REL	ST	125 ppm, 545 mg/m3	

( ) Adopted values or notations enclosed are those for which changes are proposed in the NIC

(b) The value in mg/m3 is approximate.

A3 Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

A4 Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories.

BEI Substances for which there is a Biological Exposure Index or Indices (see BEI® section)

**Engineering measures**

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

- Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.
- Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties****Appearance**

Form : Liquid  
Physical state : Liquid  
Color : Clear

**Safety data**

Flash point : 27 °C (81 °F)  
Method: closed cup  
Lower explosion limit : 1.1 %(V)  
Upper explosion limit : 7 %(V)

Oxidizing properties : no

Autoignition temperature : 528 °C (982 °F)

Molecular formula : C<sub>8</sub>H<sub>10</sub>

Molecular Weight : 106.18 g/mol

pH : Not applicable

Pour point : No data available

Boiling point/boiling range : 138.3 °C (280.9 °F)

Vapor pressure : 0.16 PSI  
at 25 °C (77 °F)

Relative density : 0.86, 25 °C(77 °F)

Water solubility : Soluble in hydrocarbon solvents; insoluble in water.

Partition coefficient: n-  
octanol/water : log Pow: 3.15

Viscosity, kinematic : 0.70 cSt  
at 25 °C (77 °F)

Relative vapor density : 3.7  
(Air = 1.0)

Evaporation rate : No data available

Percent volatile : > 99 %

**Other information**

Conductivity : < 50 pSm  
at 20 °C

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**10. STABILITY AND REACTIVITY**

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

Conditions to avoid : No data available.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Other data : No decomposition if stored and applied as directed.

**11. TOXICOLOGICAL INFORMATION**

**Pure Para-xylene**  
**Acute oral toxicity** : LD50 Oral: 3,426 mg/kg  
Species: rat  
Method: Acute toxicity estimate

**Pure Para-xylene**  
**Acute inhalation toxicity** : LC50: 26.44 mg/l  
Exposure time: 4 HR  
Species: rat  
Test atmosphere: vapor  
Method: Acute toxicity estimate

**Pure Para-xylene**  
**Acute dermal toxicity** : LD50 Dermal: > 5,000 mg/kg  
Method: Acute toxicity estimate

**Pure Para-xylene**  
**Skin irritation** : Irritating to skin.

**Pure Para-xylene**  
**Eye irritation** : Irritating to eyes.

**Pure Para-xylene**  
**Sensitization** : Classification: Contains no substance or substances classified as sensitizing.  
Does not cause sensitization. largely based on human evidence. Information given is based on data obtained from similar substances.

**Repeated dose toxicity**  
p-Xylene : Species: rat  
Application Route: oral gavage  
Dose: 0, 100, 200, 800 mg/kg  
Exposure time: 13 wk  
Number of exposures: once daily



**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

	<p>Lowest observable effect level: 800 mg/kg Test substance: yes</p> <p>Species: rat Application Route: Inhalation Dose: 0, 450, 900, 1800 ppm Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk Lowest observable effect level: 900 ppm Test substance: yes Target Organs: Ototoxicity</p>
Ethylbenzene	<p>Species: rat, male Sex: male Application Route: Inhalation Dose: 200, 400, 600, 800 ppm Exposure time: 13 weeks Number of exposures: 6 hours/day, 6 days/week NOEL: 200 ppm Test substance: yes Target Organs: Ototoxicity</p>
o-Xylene	<p>Species: rat Application Route: Inhalation Dose: 0, 3500 ppm Exposure time: 6 wk Lowest observable effect level: 3500 ppm</p>
m-xylene	<p>Species: rat Application Route: oral gavage Dose: 0, 500, 2000 mg/kg Exposure time: 4 wk Number of exposures: 5 d/wk Lowest observable effect level: 500 mg/kg</p>
<b>Carcinogenicity</b>	
p-Xylene	<p>: Species: rat Sex: male and female Dose: 0, 250, 500 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk Remarks: No evidence of carcinogenicity, Information given is based on data obtained from similar substances.</p> <p>Species: mouse Sex: male and female Dose: 0, 500, 1000 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk Remarks: No evidence of carcinogenicity, Information given is based on data obtained from similar substances.</p>
Ethylbenzene	<p>Species: rat Sex: male and female Dose: 0,75,250 or 750 ppm Exposure time: 104 weeks Number of exposures: 6 hours/day, 5 days/week Test substance: yes</p>

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

	<p>Print Date: OECD Test Guideline 451 Remarks: increase incidence of tumors, renal tubule adenoma or carcinoma</p> <p>Species: mouse Sex: male and female Dose: 0,75,250 or 750 ppm Exposure time: 103 weeks Number of exposures: 6 hours/day, 5 days/week Test substance: yes Print Date: OECD Test Guideline 451 Remarks: increase incidence of tumors, increased incidence of alveolar/bronchiolar adenomas, Increase in liver tumors</p>
o-Xylene	<p>Species: rat Dose: 0, 250, 500 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk Remarks: No evidence of carcinogenicity</p> <p>Species: mouse Dose: 0, 500, 1000 mg/kg Exposure time: 103 wks Number of exposures: 5 d/wk Remarks: No evidence of carcinogenicity</p>
<b>Pure Para-xylene Teratogenicity</b>	: No adverse effects expected
<b>Pure Para-xylene Aspiration toxicity</b>	: May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.
<b>CMR effects</b>	
p-Xylene	: Carcinogenicity: Animal testing did not show any carcinogenic effects. Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction
Ethylbenzene	<p>Carcinogenicity: Carcinogenicity classification not possible from current data. Mutagenicity: In vivo tests did not show mutagenic effects Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction</p>
o-Xylene	<p>Carcinogenicity: Animal testing did not show any carcinogenic effects. Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Did not show teratogenic effects in animal experiments.</p>

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

m-xylene

Reproductive toxicity: No toxicity to reproduction

Carcinogenicity: Animal testing did not show any carcinogenic effects.

Mutagenicity: Did not show mutagenic effects in animal experiments.

Teratogenicity: Did not show teratogenic effects in animal experiments.

Reproductive toxicity: No toxicity to reproduction

**Pure Para-xylene  
Further information**

: Solvents may degrease the skin.  
Concentrations substantially above the TLV value may cause narcotic effects. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

**12. ECOLOGICAL INFORMATION****Toxicity to fish**

p-Xylene : LC50: 2.0 mg/l  
Exposure time: 96 HR  
Species: Marone saxatilis (striped bass)

Ethylbenzene LC50: 4.3 mg/l  
Exposure time: 96 HR  
Species: Marone saxatilis (striped bass)

o-Xylene LC50: 7.6 mg/l  
Exposure time: 96 HR  
Species: Salmo gairdneri (Rainbow trout)

m-xylene LC50: 8.4 mg/l  
Exposure time: 96 HR  
Species: Oncorhynchus mykiss (rainbow trout)  
static test Test substance: yes  
Method: OECD Test Guideline 203

**Toxicity to daphnia and other aquatic invertebrates.**

p-Xylene : EC50: 3.6 mg/l  
Exposure time: 24 HR  
Species: Daphnia  
static test Test substance: yes  
Method: OECD Test Guideline 202

Ethylbenzene LC50: 2.6 mg/l  
Exposure time: 96 HR  
Species: Mysidopsis bahia (mysid shrimp)

EC50: 2.2 mg/l  
Exposure time: 48 HR  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 202

o-Xylene EC50: 1 mg/l

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

Exposure time: 24 HR  
 Species: *Daphnia magna* (Water flea)  
 Method: OECD Test Guideline 202

m-xylene  
 EC50: 4.7 mg/l  
 Exposure time: 24 HR  
 Species: *Daphnia magna* (Water flea)  
 Immobilization Test substance: yes  
 Method: OECD Test Guideline 202

**Toxicity to algae**

p-Xylene : EL50: 3.2 mg/l  
 Exposure time: 72 HR  
 Species: *Selenastrum capricornutum* (algae)  
 static test Test substance: yes  
 Method: OECD Test Guideline 201

Ethylbenzene  
 ErC50: 5.0 mg/l  
 Exposure time: 96 HR  
 Species: *Selenastrum capricornutum* (algae)  
 ErC50: 7.7 mg/l  
 Exposure time: 72 HR  
 Species: *Skeletonema costatum* (Marine Algae)

o-Xylene  
 EC50: 4.2 mg/l  
 Exposure time: 8 DAY  
 Species: *Selenastrum capricornutum* (algae)  
 static test Analytical monitoring: yes

m-xylene  
 EC50: 4.9 mg/l  
 Exposure time: 72 HR  
 Species: *Selenastrum capricornutum* (algae)  
 static test Test substance: yes  
 Method: OECD Test Guideline 201

Elimination information (persistence and degradability)

Bioaccumulation : Does not significantly accumulate in organisms.

Biodegradability : This material is expected to be readily biodegradable.

**Ecotoxicology Assessment**

Acute aquatic toxicity : Toxic to aquatic life.

**Results of PBT assessment**

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**13. DISPOSAL CONSIDERATIONS**

The information in this MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

- Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

**14. TRANSPORT INFORMATION**

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

**US DOT (United States Department of Transportation)**

UN1307, XYLENES, 3, III, RQ (P-XYLENE)

**IMO / IMDG (International Maritime Dangerous Goods)**

UN1307, XYLENES, 3, III, RQ (P-XYLENE), (27 °C)

**IATA (International Air Transport Association)**

UN1307, XYLENES, 3, III

**ADR (Agreement on Dangerous Goods by Road (Europe))**

UN1307, XYLENES, 3, III, (D/E)

**RID (Regulations concerning the International Transport of Dangerous Goods (Europe))**

UN1307, XYLENES, 3, III

**ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)**

UN1307, XYLENES, 3, III

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code****15. REGULATORY INFORMATION****National legislation**

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard  
Chronic Health Hazard

**CERCLA Reportable Quantity** :  
p-Xylene

**SARA 302 Threshold Planning Quantity** : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Ingredients** :  
: p-Xylene 106-42-3  
: o-Xylene 95-47-6  
: m-xylene 108-38-3  
: Ethylbenzene 100-41-4

**Clean Air Act**

**Ozone-Depletion Potential** : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

**US State Regulations**

**Pennsylvania Right To Know** : p-Xylene 106-42-3  
: o-Xylene 95-47-6  
: m-xylene 108-38-3  
: Ethylbenzene 100-41-4

**New Jersey Right To Know** : p-Xylene 106-42-3  
: o-Xylene 95-47-6  
: m-xylene 108-38-3  
: Ethylbenzene 100-41-4

**California Prop. 65 Ingredients** : WARNING! This product contains a chemical known in the State of California to cause cancer.

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

**Notification status**

Europe REACH : This mixture contains only ingredients which have been subject to a pre-registration according to Regulation (EU) No. 1907/2006 (REACH).

United States of America US.TSCA : On TSCA Inventory

Canada DSL : All components of this product are on the Canadian DSL list.

Australia AICS : On the inventory, or in compliance with the inventory

New Zealand NZIoC : On the inventory, or in compliance with the inventory

Japan ENCS : On the inventory, or in compliance with the inventory

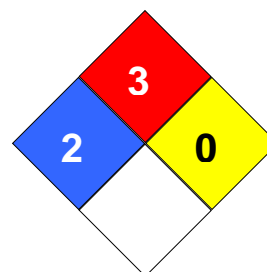
Korea KECI : On the inventory, or in compliance with the inventory

Philippines PICCS : On the inventory, or in compliance with the inventory

China IECSC : On the inventory, or in compliance with the inventory

**16. OTHER INFORMATION**

**NFPA Classification** : Health Hazard: 2  
Fire Hazard: 3  
Reactivity Hazard: 0

**Further information**

Legacy MSDS Number : CPC00488

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this MSDS pertains only to the product as shipped.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Key or legend to abbreviations and acronyms used in the safety data sheet**

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect

**Pure Para-xylene**

Version 1.5

Revision Date 2011-11-03

			Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		