

# Safety Data Sheet Xylene



1. Identification			
Product identifier	Xylene		
Product code	SOL-0021		
Other means of identification	None.		
Recommended use of the chemical and restrictions on use	A protective and/or decorative finish or accompanying paint product. Not recommended for any other use not detailed on product data sheet or label.		
Manufacturer	GEMINI INDUSTRIES, INC. 2300 Holloway Drive El Reno, OK 73036 USA  Tel. 1-800-262-5710 Fax 1-405-262-9310 www.geminicoatings.com	Distributor	Gemini Industries, Inc. 850 Flint Road Toronto, Ontario Canada M3J 2T7 Tel. 1-800-262-5710
Emergency phone number	24-hour Emergency (Spill, Leak, Exposure or accident) INFOTRAC 800-535-5053 Outside USA, Call Collect 1-352-323-3500 (French & English) HAZMAT Response and MSDS Help: EMI 800-510-8510		

# 2. Hazard identification

**Summary** 

FLAMABLE LIQUID! Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

#### WHMIS 2015/OSHA HCS 2012/GHS

Flammable liquids (Category 2)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2)
Carcinogenicity (Category 2)



Reproductive toxicity (Category 2)

Specific target organ toxicity, repeated exposure (Category 2)

Aspiration hazard (Category 1)

## Other hazards which do not result in classification:

Acute hazard to the aquatic environment (Category 1).

#### WARNING

H225: Highly flammable liquid and vapour

H304: May be fatal if swallowed and enters airways

H319: Causes serious eye irritation

H315: Causes skin irritation

H351: Suspected of causing cancer

H361: Suspected of damaging fertility or the unborn child

H373: May cause damage to organs through prolonged or repeated exposure

H400: Very toxic to aquatic life

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.

P240: Ground or bond container and receiving equipment.

P241: Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P260: Do not breathe mist, vapours and spray.

P264: Wash skin thoroughly after handling.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing and eye protection.

P301+310+331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting.

P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water and soap or take a shower if necessary.

P332+313: If skin irritation occurs: Get medical advice or attention.

P314: Get Medical advice/attention if you feel unwell.

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists: Get medical advice or attention.

P308+313: IF exposed or concerned: Get medical advice/attention.

P321: Specific treatment (see section 4 of SDS or on this label).

P362+364: Take off contaminated clothing and wash before reuse.

P370+378: In case of fire: Use the National Fire Protection Association Class B extinguisher for extinction.

P391: Collect spillage.

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

P405: Store locked up.

P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

3. Composition/information on ingredients			
Common name	CAS	Weight % content	
Xylene	1330-20-7	79 - 81 %	
Ethylbenzene	100-41-4	19 - 21 %	

4. First-aid measures			
Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. If a problem develops or persists, seek medical attention.		
Skin contact	Wash skin with warm water and mild soap for at least 15 minutes. Remove contaminated clothing and wash before reuse. Avoid touching eyes with contaminated body parts. If a problem develops or persists, seek medical attention.		
Eye contact	IMMEDIATELY! Flush with water for at least 15 minutes. Remove contact lenses. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.		
Ingestion	DO NOT induce vomiting, unless recommended by medical personnel. Never give anything by mouth if victim is unconscious or convulsing. If victim is conscious wash out mouth with water and give 1-2 glasses of water to drink. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.		
Other	No information available.		
Symptoms	May cause redness and irritation of the skin and to eyes. Inhalation of vapours may cause central nervous system depression such as drowsiness, headache, dizziness, vertigo, nausea and fatigue. Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement		

	include increased respiratory rate, increased heart rate, and a bluish discolouration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.
Notes to the physician	Treat symptomatically. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures		
Suitable extinguishing media	Class B extinguishers. Dry chemicals, alcohol resistant foam, carbon dioxide (CO2). Do not use direct water jet.	
Specific hazards arising from the chemical	Very flammable liquid and vapours. May be ignited by heat, sparks, flame or static electricity. Vapours are heavier than air and may travel to an ignition source distant from the material handling point. Do not apply to hot surfaces. Contact with strong oxidizers may cause fire. In a fire or if heated, a pressure increase will occur and the container may burst. Emits toxic fumes under fire conditions.	
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.	
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Water spray can reduce the intensity of the flames. However, the water jets can spread the fire. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.	

6. Accidental rel	6. Accidental release measures		
Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.		
Environmental precautions	Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities.		
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the area well. Stop leak, if it's possible to do so without risk. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Use non-sparking and antistatic tools. Dispose via a licensed waste disposal contractor. Finish cleaning the contaminated surface by rinsing with soapy water. PS: Rags and others materials soaked with paint or solvent may spontaneously catch fire if improperly store or discarded. Immediately after each use place rags and paper towels in a sealed water-filled metal container to prevent spontaneous combustion.		

Precautions for safe handling	Keep away from heat, sparks and open flame. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Use non-sparking and antistatic tools. Ground/bond all containers when transfering large quantities (5 gallons US or 20 L and more). Use only in well ventilated area. Avoid prolonged or repeated breathing of vapour or mists. Avoid contact with skin, eyes and clothing. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Containers of this material may be hazardous even when empty. Since empty containers retain product residues (vapour, liquid), all hazard precautions given in this sheet must be observed. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse. Rags, steel wool and paper towels soaked with this product may overheat and spontaneously ignite if piled in a heap. After use immediately store them in water-filled
Conditions for safe storage, including any	metal can with tight fitting lid.  Storage and handling should follow the NFPA 30 Flammable and/or Combustible Liquids Code and the National Fire Code of Canada (NFCC). Store tightly closed and in properly labelled container in a

•	dry, cool and well ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.
Storage temperature	10 to 25°C (50 to 77°F)

8. Exposure controls/personal protection					
Immediately Dangerous to Life or Health		Xylenes: 900 ppm. Ethylbenzene: 800 pp	pm.		
Xylene	ST	EL	150 ppm 150 ppm	651 mg/m <sup>3</sup>	ACGIH , BC, ON RSST
	ΤV	VA (8h)	100 ppm	001 mg/m	ACGIH , BC, ON
		., (011)	100 ppm	434 mg/m <sup>3</sup>	RSST
Ethylbenzene	ST	EL	125 ppm	543 mg/m <sup>3</sup>	RSST
	ΤV	VA (8h)	20 ppm	· ·	ACGIH, BC, ON
			100 ppm	434 mg/m <sup>3</sup>	RSST
Appropriate engineering controls					
Eye		Wear chemical splash goggles.			
Hands		Wear nitrile or neoprene gloves. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.			
Skin		Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. If necessary, wear an apron or long-sleeve protective coverall suit.			
Respiratory		Respiratory protection is not required for normal use. Respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and CSA Standard Z 94.4 and approved by NIOSH / MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit, wear a half mask respirator with organic vapour cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with organic vapour cartridges and P100 filters.			
Feet		Wear rubber boots to clean up a spill.			

9. Physical and chemical properties				
Physical state	Liquid	Flammability	Flammable	
Colour	Clear	Flammability limits	N/Av.	
Odour	Aromatic solvent	Flash point	21°C (69.8°F)	
Odour threshold	N/Av.	Auto-ignition temperature	N/Av.	
рН	N/Ap.	Sensibility to electrostatic charges	Yes	
Melting point	N/Av.	Sensibility to sparks and/or friction	No	

Freezing point	N/Av.	Vapour density	>1 (Air = 1)
Boiling point	136°C (276.8°F)	Relative density	0.8719 kg/L (Water = 1)
Solubility	Insoluble in water.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	> Butyl Acetate	Decomposition temperature	N/Av.
Vapour pressure	N/Av.	Viscosity	N/Av.
Percent Volatile	100%	Molecular mass	N/Ap.
N/Av.: Not Available N/Ap.: Not Applicable Und.: Undetermined N/E: Not Established			

10. Stability and reactivity	
Reactivity	No information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Avoid heat, flame and sparks. Avoid contact with incompatible materials.
Incompatible materials	Strong bases, mineral acids, strong oxidizing agents (such as nitric acid, perchloric acid, peroxides, chlorates and perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicolo	ogical information					
Numerical measures of toxicity	,	tion 3523 mg/kg Rat LD50 ation 27.6 mg/l/4h Rat LC50 3200 mg/kg Rabbit LD50				
		tion 3500 mg/kg Rat LD50				
	Inhala Skin	ation 17.3 mg/l/4h Rat LC50 15380 mg/kg Rabbit LD50				
Likely routes of exposure	Skin, eyes, inhalatio	n, ingestion.				
Delayed, immediate and chronic effects						
	Skin contact  May cause redness, dryness, rash and skin irritation. Prolonged and repeated contact may cause dry skin, irritation or dermatitis. The data indicate that xylene is moderately irritating to the skin (Draize-Test). The available data indicate that ethylbenzene was moderately irritating to the skin and can cause moderate necrosis.					
	Inhalation	Excessive inhalation is harmful. Inhalation of vapours may cause central nervous system depression such as drowsiness, headache, dizziness, vertigo, nausea and fatigue. The severity of symptoms may vary depending on exposure conditions. Repeated and prolonged occupational overexposure to solvents may cause brain and nervous system damage.				
	Ingestion	Ingestion of large amounts may cause depression of the central nervous system characterized by headache, dizziness, convulsions and loss of consciousness. Harmful or fatal if inhaled into the lungs (ingestion/vomiting). Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discolouration of				

	sensitization IARC/NTP Classification  Carcinogenicity  Mutagenicity  Reproductive toxicity Specific target organ toxicity - single exposure Specific target organ toxicity -	the skin. Coughing, choking and gagging are often noted at the time of aspiration. Ingredients present at levels greater than or equal to 0.1% of this product are not skin or respiratory sensitizers.  Common name IARC NTP  Ethylbenzene 2B - IARC: 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP: K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens.  Contains a substance that can cause cancer based on animal data. The risk of cancer depends on duration and level of exposure.  Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.  Xylene overexposure may affect fetal development in laboratory animals by inhalation during pregnancy.  No target organ is listed.  Central nervous system, hearing organs, kidneys, liver.		
Interactive	repeated exposure  No information availa	ble for this product		
effects	140 momation availa	bio for this product.		
Other information	The acute toxicity estimate (ATE) by inhalation of the mixture was calculated to be greater than 20 mg/L/4h. This value is not classified according to GHS. The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000 mg/kg but lower than 5000 mg/kg. These values are classified category 5 by the GHS. These values are not classified according to WHMIS 2015 and OSHA HCS 2012.			

12. Ecologic	eal information			
Ecological toxicity	Fish - Oncorhynchus mykiss - Rainbow trout LC50 13.5-17.3 mg/L; 96 h (Xylene)  Aquatic Invertebrate - Daphnia magna EC50 3.82 mg/L; 48 h (Xylene)  Fish - Oncorhynchus mykiss - Rainbow trout LC50 4.2 mg/L; 96 h (Ethylbenzene)  Aquatic invertebrate - Crangon franciscorum EC50 0.49 mg/L; 48 h (Ethylbenzene)			
Persistence	Not persistent in environment.			
Degradability	Xylene in air is rapidly decomposed by photochemical processes, mainly through oxidation by hydroxyle free radicals as well as some decomposition by direct photolysis. The half-life time in air is estimated to be from 9.5 to 19.7 hours depending to the isomer. Xylene is readily biodegradable at 68% in 10 days and at 88% in 28 days (OECD Guideline 301F) with BOD5/COD ratio of 0.97 (IUCLID). Ethylbenzene is biodegraded fairly rapidly by sewage or activated sludge (TOXNET).			
Bioaccumulative potential	Xylene has Bioconcentration Factor (BCF) of 6 to 23.4 and a partition factor Log Kow of 3.1 to 3.2, depending to the isomer. These values suggest a low potential of bioaccumulation (TOXNET). Ethylbenzene has a low potential for bioaccumulation (BCF) of 1.1 to 15 were measured in four species of fish. It has low water solubility and a moderate partition coefficient (Log Kow of 3.15).			
Mobility in soil	Xylene will rapidly evaporate into the atmosphere because of its low soil absorption and its low solubility in water. Koc values range from 39-365 for the individual isomers. These values suggest that xylenes are expected to have high to moderate mobility in soil (TOXNET). Ethylbenzene is expected to have a moderate mobility in soil with an estimated Koc value of 520 (TOXNET).			
Other adverse effects	This chemical does not deplete the ozone layer.			

# 13. Disposal considerations



Important! Prevent waste generation. Use in full. DO NOT dispose of residue in sewers, streams or drinking water supply. DO NOT puncture, cut, heat or burn container, even after use. Paint residues, including lacquers, stains, shellac, varnish, solvents and paint thinners, can be reprocessed (recycle) anywhere there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

14. Transport information						
UN Number	UN 1307					
UN Proper Shipping Name	(YLENES					
Environmental hazards	This material does not contain marine pollutant.					
Special precautions for user	Permit required for transportation with proper placards displayed on vehicle.					
TDG - Transportation of Dangerous Goods (Canada)						
Transport hazard class(es)	Class 3					
Packing group	II .					
IMO/IMDG - Internationa	Maritime Transport					
Classification	UN 1307. XYLENES. Class 3, PG II. Emergency schedules (EmS-No) F-E, S-D					
IATA - International Air	Transport Association					
Classification	UN 1307. XYLENES. Class 3, PG II.					
	re provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper					

# 15. Regulatory information

#### **CANADA**

Common name	CAS	CEPA	DSL	NDSL	NPRI
Xylene	1330-20-7	Х	X		X
Ethylbenzene	100-41-4	Х	X		X

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act

transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

#### **UNITED STATE OF AMERICA**

Common name	CAS	TSCA	CERCLA	EPCRA 313	EPCRA 302/304	112(b)	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Priority
Xylene	1330-20-7	Х	Χ	X		X	X		Χ	
Ethylbenzene	100-41-4	Х	Х	Х		Х	Х		Х	Χ

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act List of Hazardous Substances
- CWA Priority: Clean Water Act Priority Pollutant list

## **California Proposition 65**

Common name	CAS	Cancer	Reproductive and Developmental Toxicity		
Ethylbenzene	100-41-4	X			

### Other regulations

### **WHMIS 1988**





B2 D2A D2B

Class B2: Flammable Liquid

Class D2A: Very toxic material causing other toxic effects Class D2B: Toxic material causing other toxic effects

#### **HMIS**







Date (YYYY-MM-DD)	GEMINI INDUSTRIES, INC. 2016-03-21
Version	01
Other information	- This SDS and the GHS hazards classification is a French translation of the original English version (SDS) from the manufacturer.  REFERENCES: - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php - TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, http://toxnet.nlm.nih.gov/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca - NIOSH Pocket Guide to Chemical Hazards, Centers for Disease Control and Prevention, NIOSH Publications, 2007, http://www.cdc.gov/niosh/npg/npg.html - IPCS INCHEM, Chemical Safety Information from Intergovernmental Organizations, Canadian Centre for Occupational Health and Safety (CCOHS), Copyright International Programme on Chemical Safety (IPCS), http://www.inchem.org - OECD Existing Chemicals Database, Chemicals Screening Information DataSet (SIDS) for High Volume Chemicals, UNEP publications, http://webnet.oecd.org/HPV/UI/Search.aspx
	ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association

OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health

NTP: National Toxicology Program

RSST: Règlement sur la santé et la sécurité du travail (Québec)

GHS: Globally Harmonized System

IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min)

TWA: Time Weighted Averages

WHMIS: Workplace Hazardous Materials Information System

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