

## **Safety Data Sheet**

# Xylenes Semi Grade - <200 ppm RAE

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Xylenes Semi Grade - <200 ppm RAE

**Synonyms/Generic Names:** Mixed xylenes (o-, m-, p- isomers)

**Product Number: 0607** 

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)

www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

#### 2. HAZARDS IDENTIFICATION

Hazardous Not Otherwise Classified (HNOC): None

Target Organs: Not available

Signal Word: Danger

**Pictograms:** 







#### **GHS Classification:**

Flammable liquids	Category 3
Acute toxicity, Inhalation	Category 4
Acute Toxicity, Dermal	Category 4
Skin corrosion/irritation	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity-repeated exposure	Category 2
Aspiration hazard	Category 1
Hazardous to the aquatic environment, acute hazard	Category 2
Hazardous to the aquatic environment, long-term hazard	Category 2

#### **GHS Label Elements, including precautionary statements:**

#### **Hazard Statements:**

H226	Flammable liquid and vapor.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.

Created on 10/18/2022 Page 1 of 9

H312	Harmful in contact with skin.
H351	Suspected of causing cancer.
H373	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long-lasting effects.

**Precautionary Statements:** 

Precautionary State	anents.		
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/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/vapors/spray.		
P264	Wash hands thoroughly after handling.		
P271	Use in a well-ventilated area.		
P273	Avoid release to the environment.		
P280	Wear protective gloves/protective clothing/eye protection/face protection.		
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse		
	skin with water/shower.		
P301+P310+P331	1   IF SWALLOWED: Do not induce vomiting. Immediately call a POISON		
	CENTER or doctor/physician.		
P312	Call a POISON CENTER/doctor/physician if you feel unwell.		
P332+P337+P313	If skin or eye irritation occurs: Get medical advice/attention.		
P308+P313	IF exposed or concerned: Get medical advice/attention.		
P362	Take off contaminated clothing and wash it before reuse.		
P370+P378	In case of fire: Use appropriate media to extinguish.		
P391	Collect spillage.		
P403+P235	Store in a well-ventilated place. Keep cool.		
P405	Store locked up.		
P501	Dispose of contents/container in accordance with local regulations.		

#### **Potential Health Effects**

Eyes	May cause temporary discomfort or irritation to the eye. High vapor concentration may also be irritating.
Inhalation	Breathing of high vapor concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.
Skin	Causes skin irritation. Prolonged exposure may cause skin drying. Defatting to the skin.
Ingestion	Liquid is moderately toxic and may be harmful if swallowed and enters airways. Irritating to mouth, throat and stomach. Ingestion of product may result in vomiting; aspiration (breathing) of vomitus into the lungs must be avoided as even small a quantities may result in aspiration pneumonitis.

#### **NFPA Ratings**

Health	2
Flammability	3
Reactivity	0
Specific hazard	Not Available

**HMIS Ratings** 

9		
Health	2	
Fire	3	
Reactivity	0	

Created on 10/17/2022 Page 2 of 9

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Xylenes	80 - 90	1330-20-7	215-535-7	C <sub>8</sub> H <sub>10</sub>	106.17 g/mol
Ethylbenzene	10 - 19	100-41-4	202-849-4	C <sub>8</sub> H <sub>10</sub>	106.17 g/mol
Toluene	0 - 0.5	108-88-3	203-625-9	C <sub>7</sub> H <sub>8</sub>	92.14 g/mol
Benzene	0 - 0.01	71-43-2	200-753-7	C <sub>6</sub> H <sub>6</sub>	78.11 g/mol

## 4. FIRST-AID MEASURES

Eyes	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 15 minutes. Rest eyes for 30 minutes. If redness, burning, blurred vision or swelling persist, contact a physician.
Inhalation	Remove the 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. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in the recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin	Wash skin thoroughly with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.
Ingestion	<b>Do not induce vomiting!</b> Get medical attention immediately. Wash out mouth with water. 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. 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.
General Advice	Get medical advice / attention if you feel unwell. Show this safety data sheet to the doctor.

## 5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use a direct stream of water. Material will float and can be re-ignited on surface of water. Use appropriate media for adjacent fire. Cool containers with water.		
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.		
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides) under fire conditions. (See also Stability and Reactivity section).		

Created on 10/17/2022 Page 3 of 9

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosol. Remove the employees that are not involved from the spill area and call the emergency team.		
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.		
Methods and materials for containment and cleaning up	Neutralize spill. Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.		

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

#### Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Eliminate all ignition sources. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such container to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause injury or death. Separate from oxidizing materials. Keep the container tightly closed and sealed until ready for use. Keep away from incompatible materials (see section 10 for incompatibilities).

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Ventilation and appropriate grounding of containers.

Component	Exposure Limits	Basis	Entity
Xylene	100 ppm (434 mg/m³)	TWA (BEI)	ACGIH® TLVs®
	150 ppm (651 mg/m <sup>3</sup> )	STEL (BEI)	ACGIH® TLVs®
	100 ppm (435 mg/m <sup>3</sup> )	TWA	OSHA PELs
	100 ppm (435 mg/m <sup>3</sup> )	TWA	NIOSH RELs
	150 ppm (655 mg/m <sup>3</sup> )	STEL	NIOSH RELs
Ethyl benzene	20 ppm (87 mg/m <sup>3</sup> )	TWA (BEI; NIC-OTO)	ACGIH® TLVs®
	100 ppm (435 mg/m <sup>3</sup> )	TWA	OSHA PELs
	100 ppm (435 mg/m <sup>3</sup> )	TWA	NIOSH RELs
	100 ppm (435 mg/m <sup>3</sup> )	TWA	NIOSH RELs
	125 ppm (545 mg/m <sup>3</sup> )	STEL	NIOSH RELs
Toluene	20 ppm	TWA (OTO; BEI)	ACGIH® TLVs®
	200 ppm	TWA	OSHA PELs
	300 ppm	CEIL	NIOSH RELs
	500 ppm	STEL (10-min peak per 8-hr shift)	OSHA PELs

Created on 10/17/2022 Page 4 of 9

	100 ppm (375 mg/m <sup>3</sup> )	TWA	NIOSH RELs
	150 ppm (560 mg/m <sup>3</sup> )	STEL	NIOSH RELs
Benzene	0.5 ppm (1.6 mg/m <sup>3</sup> )	TWA (Skin; BEI)	ACGIH® TLVs®
	2.5 ppm (8 mg/m <sup>3</sup> )	STEL (Skin; BEI)	ACGIH® TLVs®
	1 ppm (3 mg/m <sup>3</sup> )	TWA (See 29CFR1910.1028)	OSHA PELs
	5 ppm (15 mg/m <sup>3</sup> )	STEL(See 29CFR1910.1028)	OSHA PELs
	0.1 ppm	TWA (see Pocket Guide App.A)	NIOSH RELs
	1 ppm	STEL	NIOSH RELs

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes. IDLH: Immediately Dangerous to Life or Health WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

#### **Personal Protection**

Eyes	Wear chemical safety glasses or goggles with face shield if splashing is likely to occur.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an
	approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat.
Other	Handle in accordance with good industrial hygiene and safety practices.

#### **Other Recommendations**

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, water-white liquid.
Odor	Faint aromatic hydrocarbon odor.
Odor threshold	Not Available
pH	Essentially neutral
Melting point/freezing point	-47.7°C (-54°F)/Not Available
Initial boiling point and boiling range	136-145 °C (277-293 °F)
Flash point	27 °C (81 °F) TAG Closed Cup
Evaporation rate	0.7 (n-Butyl Acetate = 1)
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Lower: 0.01
	Upper: 0.07
Vapor pressure	4.5 kPa @ 20°C / 68°F at 50°C (122°F)
Vapor density	3.7 Heavier than air
Density	0.87 at 15.5°C (60°F)
Solubility (ies)	Negligible
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	432°C to 530°C (810°F to 986°F)
Decomposition temperature	Not Available

#### 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal storage conditions.
Possibility of Hazardous Reactions	Will not occur under normal storage conditions.
Conditions to Avoid	Heat, flames, sparks.
Incompatible Materials	Strong oxidizing agents.

Created on 10/17/2022 Page 5 of 9

Hazardous Decomposition Products	Carban avidas
Hazardous Decomposition Products	Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

#### Xylenes

Skin	LD50 Dermal – Rabbit - >2000 mg/kg
Eyes	Not Available
Respiratory	LC50 Inhalation – Rat – 6700 ppm – 4hr
Ingestion	LD50 Oral – Rat – 4300 mg/kg

#### Ethylbenzene

Skin	LD50 Dermal – Rabbit - >5000 mg/kg
Eyes	Not Available
Respiratory	Not Available
Ingestion	LD50 Oral – Rat – 3500 mg/kg

#### Benzene

Skin	LD50 Dermal – Rabbit - >14,000 mg/kg
Eyes	Not Available
Respiratory	~4000 (NINHL rat)
Ingestion	LD50 Oral – Rat – 636 mg/kg

#### Toluene

Skin	LD50 Dermal – Rabbit - >14,000 mg/kg
Eyes	Not Available
Respiratory	Not Available LC50 Inhalation – Mouse – 400 ppm – 24hr
Ingestion	LD50 Oral – Rat – 636 mg/kg

#### Carcinogenicity

IARC	3: Not classifiable as to its carcinogenicity to humans (Xylene).
	2B: Possibly carcinogenic to humans (Ethyl benzene).
	3: Possibly carcinogenic to humans (Toluene).
	1: Carcinogenic to humans (Benzene)
ACGIH	A4: Not classifiable as a human carcinogen (Xylene & Benzene).
	A3: Animal carcinogen (Ethyl benzene).
	A1: Confirmed human carcinogen (Benzene).
NTP	K: Known to be human carcinogen (Benzene).
OSHA	Yes: Carcinogen defined with no further categorization (Benzene).

## Signs & Symptoms of Exposure

Skin	Irritation, redness.
Eyes	Irritation, redness, watering eyes, itchiness.
Respiratory	Headache, weakness, memory loss, irritability, dizziness, giddiness, loss of coordination
	and judgment, respiratory depression/arrest or difficulty breathing.
Ingestion	Abdominal pain, vomiting, and nausea.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Listed: Benzene
Specific Target Organ Toxicity	Not Available
Reproductive Toxicity	Listed: Toluene, Benzene

Created on 10/17/2022 Page 6 of 9

Respiratory/Skin Sensitization	Not Available

#### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

**Xylenes** 

Aquatic Vertebrate	LC50 - Lepomis macrochirus (fresh water fish) – 15,700 µg/l - 96 hrs
Aqualic vertebrate	
	LC50 - Lepomis macrochirus (fresh water fish) - 19,000 μg/l - 96 hrs
	LC50 - Pimephales promelas (fresh water fish) – 13,400 µg/l - 96 hrs
	LC50 - Carassius auratus (fresh water fish) – 16,940 µg/l - 96 hrs
Aquatic Invertebrate	EC50 - Cypris subglobosa (fresh water crustacean) 90 mg/l - 48 hrs
	LC50 - Palaemonetes pugio (marine water Crustacean) 8.5 ppm - 48 hrs
Terrestrial/Algae	Not available

#### Ethyl benzene

Aquatic Vertebrate	LC50 - Oncorhynchus mykiss (fresh water fish) – 4,200 µg/l - 96 hrs	
Aquatic Invertebrate	EC50 - Daphnia magna (fresh water flea) – 2,930 µg/l 48 hrs	
	LC50 - Americamysis bahia (marine water crustaceans) - 5200 µg/l - 48 hrs	
Terrestrial/Algae	EC50 - Pseudokirchneriella subcapitata (fresh water algae) – 4,600 µg/l 72 hrs	
	EC50 - Pseudokirchneriella subcapitata (fresh water algae) – 3,600 μg/l 96 hrs	
	NOEC - Pseudokirchneriella subcapitata (fresh water algae) – 1,000 μg/l 96 hrs	

#### Toluene

Aquatic Vertebrate	LC50 - Lepomis macrochirus (bluegill) - 74.00 - 340.00 mg/l - 96 hrs		
	LC50 - Oncorhynchus mykiss (rainbow trout) – 7.63 mg/l - 96 hrs		
	NOEC - Pimephales promelas (fathead minnow) – 5.44 mg/l – 7 days		
	LOEC - Pimephales promelas (fathead minnow) – 8.04 mg/l – 7 days		
Aquatic Invertebrate	EC50 - Daphnia magna (water flea) – 8.00 mg/l		
_	Immobilization EC50 – Daphnia magna (water flea) – 6mg/l – 48 hrs		
Terrestrial/Algae	EC50 - Chlorella vulgaris (fresh water algae) – 245.00 mg/l – 24 hrs		
	EC50 - Pseudokirchneriella Subcapitata (green algae) – 10.00 mg/l – 24hrs		

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

## 13. DISPOSAL CONSIDERATIONS

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

Created on 10/17/2022 Page 7 of 9

#### 14. TRANSPORTATION INFORMATION

US DOT	UN1307, Xylenes, 3, pg III
TDG	UN1307, XYLENES, 3, PG III
IMDG	UN1307, XYLENES, 3, PG III
Marine Pollutant	No
IATA/ICAO	UN1307, Xylenes, 3, pg III

#### 15. REGULATORY INFORMATION

	I
TSCA Inventory Status	All ingredients are listed on the Active TSCA inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Listed: Ethyl benzene, Toluene, Benzene
Massachusetts: Toxic or Hazardous Substance	Listed: Xylenes, Ethyl Benzene, Toluene, Benzene
List, Right to Know	
New Jersey: Right to Know Hazardous Substance	Listed: Xylenes, Ethyl benzene, Toluene, Benzene
List	, ,
Pennsylvania: Hazardous Substance List	Listed: Xylenes, Ethyl Benzene, Toluene, Benzene
Rhode Island: Hazardous Substance List	Listed: Xylenes, Ethyl Benzene, Toluene, Benzene
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Fire Hazard, Acute Health Hazard, Chronic Health
	Hazard
SARA 312	Fire Hazard, Acute Health Hazard, Chronic Health
	Hazard
SARA 313	Listed: Xylene, Ethyl benzene, Toluene, Benzene
WHMIS Canada	Class B: Flammable and Combustible Material
	Class D-2A: Poisonous and infectious material- Other
	effects- Very toxic
	Class D-1B: Poisonous and infectious material-
	Immediate and serious effects- Toxic

#### **16. OTHER INFORMATION**

Revision	Date
Created	10/17/2022

Disclaimer: The information provided in this Safety Data Sheet ("SDS") is correct to the best of our knowledge, information and belief at the date of publication. The information in this SDS relates only to the specific Product identified under Section 1, and does not relate to its use in combination with other materials or products, or its use as to any particular process. Those handling, storing or using the Product should satisfy themselves that they have current information regarding the particular way the Product is handled, stored or used and that the same is done in accordance with federal, state and local law. WE DO NOT MAKE ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING (WITHOUT LIMITATION) WARRANTIES WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION

Created on 10/17/2022 Page 8 of 9

CONTAINED HEREIN OR WITH RESPECT TO FITNESS FOR ANY PARTICULAR USE. WE DO NOT ASSUME RESPOSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, INJURY, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT.

Created on 10/17/2022 Page 9 of 9