

MATERIAL SAFETY DATA SHEET

SECTION I. PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: **UNIAROM® XYLENE IF**

CHEMICAL NAME: Mixed xylenes (limited para-xylene content)

CHEMICAL FAMILY: Petroleum Hydrocarbons CAS#: 1330-20-7

CARCINOGENICITY: NTP: No IARC: No OSHA: No

Contains >20% P-Xylene (106-42-3), <0.5% Toluene (108-88-3), <0.05% Benzene (71-43-2) and <20% Ethyl Benzene (100-41-4).

EMERGENCY TELEPHONE NUMBERS:

UniSource Energy, Inc.
1-800-444-5510

CHEMTREC
1-800-424-9300

SECTION II. HAZARDOUS COMPONENTS OF MIXTURES

COMPONENTS:

CAS Number	Material or Component	% By Weight
1330-20-7	MIXED XYLENES (LIMITED PARAXYLENE)	80% min.
100-41-4	ETHYLBENZENE	20% max.

TLV/TWA = 100 ppm, tlv/stel = 150 ppm, PEL/TWA = 100 ppm

SECTION III. HEALTH INFORMATION

FIRST AID AND NATURE OF HAZARD:

EYE CONTACT: Flush eyes with large amounts of water for 15 minutes while holding eyelids open. Seek medical help attention.

SKIN CONTACT: Flush with water while removing contaminated clothing and shoes. Wash exposed portions of the skin with soap and water. Do not reuse clothing or shoes until cleaned. If irritation persists, seek medical attention. May cause sensation, redness, edema, dermatitis, folliculitis or oil acne. Prolonged or repeated skin contact may result in absorption of potentially harmful amounts of material.

INHALATION: Remove person to fresh air immediately. Keep person warm and quiet. If breathing has stopped, apply artificial respiration and administer oxygen if necessary. Seek medical attention.

INGESTION: Do not induce vomiting. Give 2-4 ounces of vegetable oil to drink, plus 1-2 ounces activated charcoal. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid in lungs. Seek medical attention immediately.

AGGRAVATED MEDICAL CONDITIONS: Pre-existing skin and respiratory disorders may be aggravated by exposure to this product.

US OSHA HAZARD COMMUNICATIONS STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EFFECTS OF OVEREXPOSURE: Irritation to eyes, nose and throat at exposure levels above 100 ppm. Respiratory irritation, dizziness, nausea, loss of consciousness. Respiratory distress, confusion and coma in cases of significant overexposure. Excessive breathing of vapors can result in temporary liver or kidney damage. Prolonged repeated skin contact with low viscosity materials may de-fat the skin resulting in possible irritation and dermatitis. Swallowing may result in severe gastrointestinal irritation.

SECTION III. HEALTH INFORMATION (continued):**ACUTE TOXICITY DATA:**

Acute Oral LD50 | Acute Dermal LD50 | Acute Inhalation LC50
4300 mg/kg, Rat | >1.7 g/kg., Rabbit | 5000 ppm/4 hour (Rat)

GENETIC TOXICOLOGY (SUMMARY): Xylene was not mutagenic in a series of tests to determine genetic activity.

REPRODUCTIVE TOXICOLOGY (SUMMARY): There are no known reproductive effects in humans exposed to Xylenes. Para-Xylene appears to be more toxic to developing fetuses than other isomers and may cause pre-implantation losses in animals at greater than 230 ppm. No birth defects or toxic effects on developing fetuses were observed in studies of pregnant rats exposed to 500 ppm commercial Xylene. In reproductive studies at levels up to 500 ppm, no birth defects or adverse effects on fertility were observed. At 500 ppm, birth weights of the young were slightly lower.

CHRONIC TOXICOLOGY (SUMMARY): Technical grade Xylene was tested by NTP by long-term oral administration to rats and mice, with no carcinogenic or other adverse effects reported. Prolonged repeated skin contact with low viscosity materials may de-fat the skin resulting in possible irritation and dermatitis.

SECTION IV. PERSONAL PROTECTION

EYES: Normal industrial eye protection practices should be employed.

SKIN: If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.

INHALATION: Approved respiratory protective equipment must be used when vapor or mists concentrations exceed applicable standards.

VENTILATION: Use in well ventilated area with local exhaust ventilation. Ventilation required and equipment must be explosion proof. Use away from all ignition sources.

SUBSTANCE NAME	CAS NO.	SOURCE	-----TWA----		-----STEL----	
			ppm	mg/m3	ppm	mg/m3
M-Xylene	108-38-3					
O, M, P - Isomers		ACGIH	100	434	150	651
Ethyl Benzene	100-41-4	OSHA	100	435	125	545
		ACGIH	100	434	125	543
O-Xylene	95-47-6					
O, M, P - Isomers		ACGIH	100	434	150	651
P-Xylene	106-42-3					
O, M, P - Isomers		ACGIH	100	434	150	651
Toluene	108-88-3					
Skin		OSHA	100	375	150	560
		ACGIH	50	188		

SECTION V. FIRE PROTECTION

FLASH POINT: >25°C (TCC) Flammable limits (%Vol.) LEL: 1.1 UEL: 7.0

AUTO-IGNITION TEMPERATURE: 527°C

EXTINGUISHING MEDIA: Water spray, foam, dry chemicals, CO₂. Water may be ineffective in fighting an oil fire unless used by experienced fire fighters.

SPECIAL FIRE FIGHTING PROCEDURES: Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive-pressure NIOSH approved self-contained breathing apparatus. Use water only to cool fire exposed containers.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) or heat from the torch will form vapor that can ignite explosively.

NFPA FIRE HAZARD CLASS: HEALTH 2 FIRE 3 REACTIVITY 0 SPECIAL -

CAS # - Service registry # which identifies the product or ingredients

NTP - National Toxicology Program

IARC - International Agency for Research on Cancer

OSHA - Occupational Safety and Health Administration

ACGIH - American Conference of Governmental Industrial Hygienists

TLV - ACGIH threshold limit value, current

TWA - Time weighted average concentration for 8-hour workday exposure

STEL - ACGIH short-term exposure limit (15 minute weighted average)

N/A - Not available or relevant information found

NA - Not applicable

NFPA - National Fire Protection Association

SECTION VI. ENVIRONMENTAL PROTECTION

ENVIRONMENTAL FATE & EFFECTS: This material is toxic to fish and wildlife. Do not discharge into lakes, streams, ponds, etc.

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the resource conservation and recovery act. In addition, the product is suitable for processing by an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: Disposal of unused product may be subject to RCRA regulations (40 CFR 261) due to the characteristic(s)/chemical(s) listed below. Disposal of the used product may also be regulated due to ignitability, corrosiveness, reactivity, or toxicity as determined by the toxicity characteristic leaching procedure (TCLP).

FLASH POINT: 27°C (81°F)

SECTION VII. PHYSICAL DATA

Specific Gravity: 0.87 (Water = 1)
Vapor Pressure: 8.0 mmHg @ 25°C
Boiling Point: 138.5 - 140.5°C
Vapor Density: 3.61 average (Air = 1)
Solubility in Water: Negligible
Viscosity: 0.8 cSt @ 40°C
% Volatile by Volume: <100 Wt.%; 7.25 Lbs/Gal
Pour Point: N/E
Evaporation Rate: 9.2 compared to Ether (anhydrous)
Odor Threshold: 20 ppm
Appearance: Clear liquid with Xylene odor.

SECTION VIII. REACTIVITY DATA

STABILITY: Stable.
HAZARDOUS POLYMERIZATION: Will not occur.
CONDITIONS AND MATERIALS TO AVOID: High temperature and open flame.

THERMAL DECOMPOSITION PRODUCTS: Thermal decomposition products are highly dependant on the combustion conditions.

SECTION IX. HAZARD CLASSIFICATION

DOT Proper Shipping Name: Combustible Liquid, n.o.s. (contains Xylene and Ethyl Benzene)
DOT Hazard Class & Div: Flammable Liquid, 3, PG III
DOT Identification Number: UN 1307

SECTION X. SPECIAL PRECAUTIONS

CAUTION! Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flames or heat. Keep container closed and drum bungs in place.

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized.

Minimize skin contact. Wash with soap and water before eating, drinking, or smoking or using toilet facilities. Launder contaminated clothing before reuse. Properly dispose of contaminated leather articles, including shoes, that cannot be decontaminated.

REGULATORY INFORMATION:

SARA/TITLE III: Section 302/304 - None
 Section 311/312 Reportable Hazard Categories:
 Acute (X) Chronic (X) Fire (X)

This product contains the following SARA (313) Toxic Release Chemicals:

<u>CHEMICAL COMPONENT</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION</u>
ETHYL BENZENE	100-41-4	<20.0%
BENZENE	71-43-2	<0.05%
P-XYLENE	106-42-3	>18.0%
TOLUENE	108-88-3	>0.50%

The following product ingredients are cited on the lists below:

<u>CHEMICAL NAME</u>	<u>%</u>	<u>CAS NUMBER</u>	<u>LIST CITATIONS</u>
NAPHTHALENE	0.1%	91-20-3	22
ETHYL BENZENE	Trace	100-41-4	1,10,18 THRU 21, 23,24,25,26
P-XYLENE	Trace	106-42-3	1,10,18,19,20,21,24,25
TOLUENE	2.5%	108-88-3	1,10,17 THRU 26

DATE PREPARED: JANUARY 2001

UNIAROM® XYLENE IF

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