

Xylene

SOLVENT, THINNER & CLEANER

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION

PRODUCT NAME:	Duram Xylene
SUPPLIER:	Duram (Pty) Ltd
C.A.S. No.:	1330-20-7
E.C. No.:	N/A
E.C. LABEL	N/A
ECOCHM REF.:	N/A
HAZCHEM:	(011) 331 2947
SAMPA:	N/A
IN EMERGENCY CONTACT:	THE TECHNICAL MANAGER ON: TEL: +27 21 555 3090
HEALTH EMERGENCY CONTACT:	RED CROSS POISON SERVICE: (021) 689 5227

2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: Dimethyl Benzene
HAZARDOUS COMPONENTS:

SUBSTANCE NAME:	Wt%
XYLENE (1330-20-7)	100

3. HAZARDS IDENTIFICATION

US OSHA Hazard Communication 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 vapours can result in temporary liver or kidney damage. Eye irritation. Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Swallowing may result in severe gastrointestinal irritation.

Emergency Response Data:

Colourless Liquid. Flammable. Vapour accumulation could flash and/or explode if in contact with open flame.

DOT ERG No. - 130

4. FIRST AID MEASURES

Eye Contact:

Flush thoroughly with water for at least 15 minutes. If irritation occurs, call a doctor.

Skin Contact:

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. Do not wear ordinary clothing wet with this product.

Inhalation:

Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance and call a doctor. If breathing has stopped, use mouth-to-mouth resuscitation.

Ingestion:

Do not induce vomiting. Give 1 to 2 glasses of water. Get medical assistance.

Note to Doctors:

Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

5. FIRE FIGHTING MEASURES**Extinguishing media:**

Carbon dioxide, foam, dry chemical and water fog.

Special fire-fighting procedures:

Use water to keep fire exposed containers cool. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect personnel attempting to stop leak. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Special protective equipment:

For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

Unusual fire and explosion hazards:

Flammable. Vapour accumulation could flash and/or explode if in contact with open flame.

Flash Point C: 27 (EN 57). Flammable limits - LEL: 1.1%, UEL: 7.0%.

NFPA hazard ID:

Health: 2

Flammability: 3

Reactivity: 0

Hazardous decomposition products:

Carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES – SEE ALSO SECTIONS 5,8 & 13**Notification procedures:**

Report spills as required to appropriate authorities.

Procedures if material is released or spilled:

Eliminate all ignition sources. Remove leaking containers to detached area. Adsorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up with spark-resistant shovel and remove to appropriate waste disposal facility in accordance with current applicable laws and regulations. For large spills: Contain material and pump back to holding tank for later disposal.

Environmental precautions:

Prevent spills from entering storm sewers or drains and contact with soil.

Personal precautions:

See Section 8

7. HANDLING AND STORAGE**Handling:**

Avoid contact with eyes. Avoid inhalation of vapours or mists. Use in well ventilated area away from all ignition sources. Avoid sparking conditions. Ground and bond all transfer equipment.

Storage:

Drums must be grounded and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters. Store away from all ignition sources in a cool area equipped with an automatic sprinkling system. Outside or detached storage preferred. Storage containers should be grounded and bonded. Store in a cool area away from all ignition sources.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ventilation:**

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

Respiratory protection:

Approved respiratory protective equipment must be used when vapour or mists concentrations exceed applicable standards.

Eye protection:

Chemical type goggles should be worn.

Skin protection:

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

Occupational exposure limits:

Substance name (CAS-No.)	Source	LTEL		STEL		Note
		ppm	mg/m ³	ppm	mg/m ³	
Xylene (1330-20-7)						
O,M,P - Isomers	OSHA	100	435	150	655	
O,M,P - Isomers	ACGIH	100	434	150	651	

Note: Limits shown for guidance only. Follow applicable regulations.

Threshold Limit Value: 100.00 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical characteristics are given below. Consult Product Data Sheet for specific details.

Appearance:	Liquid
Colour:	Colourless
Odour:	Xylene
Odour Threshold -ppm:	NA
pH:	NA
Boiling point °C:	>154
Melting point °C:	NA
Flash point °C:	27 (EN 57)
Flammability:	NA
Auto flammability:	NE
Explosive properties:	NA
Oxidizing properties:	NA
Vapour pressure-mmHg 20 °C:	5.1
Vapour density:	3.6
Evaporation rate:	NA
Density 20°C, kg/l:	0.863
Solubility in water:	Negligible
Partition coefficient:	NE
Viscosity at 40°C, cSt:	<1.0
Viscosity at 100°C, cSt:	0.4
Pour point °C	NE
Freezing point °C:	NE
Volatile organic compound:	NE

NA = Not Applicable, NE = Not Established, D = Decomposes

10. STABILITY AND REACTIVITY

Stability (thermal, light, etc.):

Stable

Conditions to avoid:

Heat, sparks, flame and build up of static electricity.

Incompatibility (materials to avoid):

Strong oxidizing agents, active metals, halogens, acids.

Hazardous Decomposition Products:

Carbon monoxide.

Hazardous polymerization:

Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicology:

Oral toxicity (rats):

- LD50: 4.300 g/kg Practically non-toxic.

Dermal toxicity (rabbits):

- LD50: > 2 g/kg Considered to be practically non-toxic based on single dose level testing at 2 g/kg.

Inhalation toxicity (rats):

- Harmful (LC50: greater than 2 but 5 mg/l or less). Based on testing of similar products and/or the components.

Eye irritation (rabbits):

- Irritant. Eye irritation scores: 32.0 at 24 hours, 29.0 at 48 hours, 23.0 at 72 hours, 15.0 at 4 days, 9.0 at 7 days.

Skin irritation (rabbits):

- Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). Based on testing of similar products and/or the components.

Other Acute toxicity data:

- Inhalation of vapours/mists may cause respiratory system irritation. Expected to be severely irritating to gastrointestinal tract.

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 than normal.

Chronic Toxicology (Summary):

- Technical grade xylene was tested by the 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 defat the skin resulting in possible irritation and dermatitis.

12. ECOLOGICAL INFORMATION

Environmental fate and effects:

This material is toxic to fish and wildlife. Do not discharge into lakes, streams, ponds, etc.

13. DISPOSAL CONSIDERATIONS

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 approved recycling facility or can be disposed of at any government approved 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, corrosivity, reactivity, or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP).

FLASH: 27°C

14. TRANSPORT INFORMATION**USA DOT**

Shipping name: Xylene
 Hazard class & div.: 3
 ID number: UN1307
 ERG number: 130
 Packing group: PG III
 STCC: NE
 Dangerous when wet: No
 Poison: No
 Label(s): Flammable Liquid
 Placard(s): Flammable
 Product RQ: 100 lbs (based on RQ for Xylene)
 Marpol III status: NA

IMO

Hazard class & div.: 3.3
 UN number: 1307
 Packing group: PG III
 Shipping name: Xylenes
 Label(s): Flammable Liquid
 Marpol III status: NA

ICAO / IATA

Hazard class & div.: 3
 ID / UN number: 1307
 Packing group: PG III
 Shipping name: Xylenes
 Subsidiary risk: NA
 Label(s): Flammable liquid

15. REGULATORY INFORMATION**Government Inventory Status:**

All components comply with TSCA, and EINECS/ELINCS, AICS, MITI, and DSL.

EU Labelling:

- **Symbol:** Xn Harmful..
- **Risk Phrase(s):** R10-20. Flammable. Harmful by inhalation.
- **Safety phrase(s):** S24/25. Avoid contact with skin and eyes.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

This product contains no "Extremely Hazardous Substances".

- **SARA (311 / 312) Reportable Hazard Categories: Fire, Chronic, Acute.**
- **This product contains no chemicals reportable under SARA (313) toxic release program.**
- **This product contains the following SARA (313) Toxic Release Chemicals:**

Chemical Name:	CAS Number:	Conc:
Xylenes	1330-20-7	100%

The following product ingredients are cited on the lists below:

Chemical Name:	CAS Number:	List Citations:		
Xylenes (100%)	1330-20-7	1, 10, 18, 19, 20, 21, 22, 23, 24, 25, 26		
Regulatory Lists Searched:				
1 = ACGIH ALL	6 = IARC 1	11 = TSCA 4	17 = CA P65	22 = MI 293
2 = ACGIH A1	7 = IARC 2A	12 = TSCA 5a2	18 = CA RTK	23 = MN RTK
3 = ACGIH A2	8 = IARC 2B	13 = TSCA 5e	19 = FL RTK	24 = NJ RTK
4 = NTP CARC	9 = OSHA CARC	14 = TSCA 6	20 = IL RTK	25 = PA RTK
5 = NTP SUS	10 = OSHA Z	15 = TSCA 12b	21 = LA RTK	26 = RI RTK
Code Key: CARC = Carcinogen; SUS = Suspected Carcinogen				

16. OTHER INFORMATION

OSHA Precautionary Label Text: Contains Xylene.

Warning:

- Harmful or fatal if swallowed. Flammable. Vapour harmful. May cause skin irritation on prolonged, repeated contact. Keep away from heat, sparks, and flame. Keep container closed. Use with adequate ventilation. Avoid breathing vapour or mist. Avoid prolonged, repeated skin contact.
- First aid: if swallowed, call a doctor immediately. Only induce vomiting at the instruction of a doctor. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a doctor. In case of contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Call a doctor if symptoms occur. Wash clothing before reuse. If irritation occurs, get medical attention.
- Empty containers may contain product residue, including flammable or explosive vapours, do not cut, puncture or weld on or near the container. All label warnings and precautions must be observed until container has been thoroughly cleaned or destroyed.

Attention.

- Refer to product material safety data bulletin for further safety and handling information. MPL-197 (10/92)

Use:

Solvent

Note:

ENGEN products are not formulated to contain PCBS.

Ingredient:	Percent:	CAS Number:
Xylenes	100	1330-20-7

Disclaimer:

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; the user therefore assumes all risks of use of the product and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses, which infringe valid patents, or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.