

SAFETY DATA SHEET

According to Regulation (EC) No 453/2010

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SDS -XYL-0001
Version 1.2
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Section 1: IDENTIFICATION OF SUBSTANCE/ MIXTURE AND OF THE COMPANY

1.1 Product identifier

Product name : **Xylene (mixture of isomers)**
Including product code : XYL012-2.5, XYL012-4.0

1.2 Relevant identified uses of the substance or mixture

Identified uses : Laboratory chemicals, Manufacture of substances
Uses advised against : Not applicable

1.3 Details of the supplier of the safety data sheet

Company : Elite Advanced Materials Sdn Bhd
No 1, Jalan KPK1/2, Kawasan Perindustrian
Kundang, 48020 Rawang, Selangor, Malaysia
E-mail address : enquiry@eamaterials.com

1.4 Emergency telephone number

Emergency : +603-60343766 (Local business hours only)



Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flammable liquids	Category 3
Acute toxicity (Inhalation)	Category 4
Acute toxicity (Dermal)	Category 4
Skin Irritation	Category 2
Eye Irritation	Category 2
Specific target organ toxicity – repeated exposure	Category 2
Aspiration hazard	Category 1

2.2 Label elements

Labeling in compliance to Regulation (EC) No. 1272/2008 [CLP/GHS]

Hazard pictograms



GHS02



GHS07



GHS08

Signal word

Danger

Hazard statement

H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enter airways.
H312 + H332	Harmful in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H373	May cause damage to organs (hearing organs) through prolonged or repeated exposure.

Precautionary statements

Prevention

P210 Keep away from heat.



Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 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.

2.3 Other hazards

No data available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Synonyms : Xylene (mixture of isomers)
 Formula : C₈H₁₀
 Molecular Weight : 106.17 g/mol
 CAS-No. : 1330-20-7

Hazardous components according to Regulation (EC) No 1272/2008

Component	Identity	Classification Code	H-Code	Concentration (by wt)
Xylene	CAS-No.:1330-20-7	Flam. Liq. 3	H226	<=100 %
		Acute Tox. 4	H312	
		Acute Tox. 4	H332	
		Skin Irritat. 2	H315	
		STOT SE 3	H335	
		Aspiration haz. 1	H304	
		Chronic Aq. Tox. 3	H412	

Section 4: FIRST AID MEASURES

4.1 Description of First Aid measures

General information

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water for at least 15 minutes. Remove grossly contaminated clothing, including shoes and launder before reuse. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

4.2 Most important symptoms and delayed symptoms and effects

Irritant effects

Somnolence, Dizziness, Headache, euphoria, agitation, spasms, narcosis..

4.3 Indication of any immediate medical attention and special treatment

No data available.

Section 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Foam, Carbon dioxide (CO₂), Dry powder.

Unsuitable extinguishing media

None.

5.2 Special hazards arising from the substance or mixture

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air at ambient temperatures.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for fire-fighters

Wear full protective clothing and self-contained breathing apparatus if necessary. Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone. Use water spray to cool unopened containers. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal protective equipment is required during handling. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Do not discharge into drains or water ways. Prevent further leakage or spillage if safe to do so.



6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see Section 13.

Section 7: HANDLING AND STORAGE

7.1 Precaution for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Observe label precautions.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Recommend storage temperature see product label.

7.3 Specific end use

No further relevant information available.

Section 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component	ACGIH TLV (8 hr)	CAL/OSHA PEL (8 hr)	NIOSH REL (Up to 10 hr)
Xylene	TWA: 100 ppm	TWA: 100 ppm	TWA: 100 ppm
	STEL: 150 ppm	STEL: 150 ppm	STEL: 150 ppm
		Ceiling: 300 ppm	

(OSHA)



8.2 Exposure control

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Personal protection measures, such as personal protective equipment

Never eat, drink or smoke during handling the chemical. Ensure that there is adequate ventilation, especially in confined areas.

Eye/ face protection

Face shield and safety glasses is required during handling. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Discard of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact*

Material: Viton (R)

Minimum layer thickness: 0.7 mm

Break through time: >480 min

Splash contact*

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: >30 min

(Merck, 2018; Ver 1.1)

Body protection

Impervious clothing, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.



Respiratory protection

Required when vapours/aerosols are generated.

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Colorless
Odor	:	Sweet
Order threshold	:	No data available
pH - value	:	No data available
Melting point / Range	:	-47 °C
Boiling point / Range	:	137-143 °C
Flash point	:	26 °C [closed cup]
Evaporation rate	:	No data available
Lower explosion limit - LEL	:	1.1 % (V)
Upper explosion limit - UEL	:	6.6 % (V)
Vapour pressure	:	No data available
Vapor density (air = 1)	:	No data available
Density	:	No data available
Bulk density	:	No data available
Solubility(ies)	:	No data available
Water solubility	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	466 °C
Decomposition temperature	:	Not determined
Viscosity	:	No data available
Explosive properties	:	Not classified as explosive



Oxidising properties : None

(Merck, 2018; Ver 1.5)

9.2 Other information

No data available

Section 10 : STABILITY AND REACTIVITY

10.1 Reactivity

Vapour/air-mixtures are explosive at intense warming

10.2 Chemical stability

Stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents, conc. sulfuric acid, sulfur
Risk of explosion with: Nitric acid, uranium hexafluoride.

10.4 Conditions to avoid

Heating.

10.5 Incompatible materials

Rubber, various plastics, Light metals.

10.6 Hazardous decomposition products

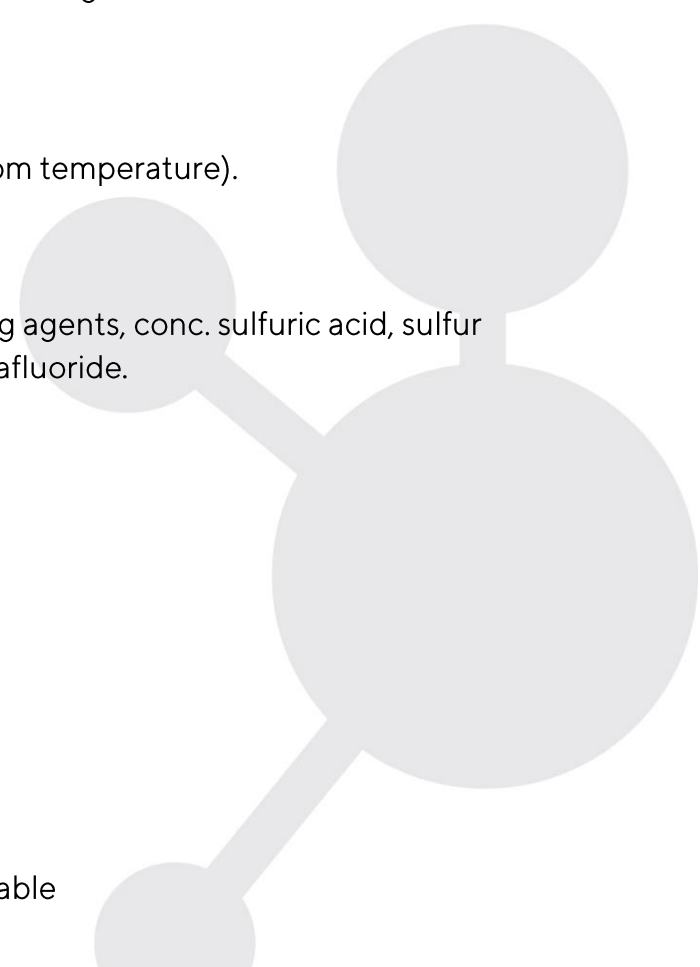
Other decomposition products - No data available

Section 11 : TOXICOLOGY INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - 3523 mg/kg/bw (Rat, males)
 - 4000 mg/kg/bw (Rat, females)





LD50 Dermal - 12126 mg/kg/bw (Rabbit)

LC50 Inhalation - 29091 mg/m³/4h (Rat)

(ECHA)

Skin corrosion/irritation

Drying-out effect causes rough and chapped skin.

Remarks – Skin irritation

(Merck, 2018; Ver 1.1)

Serious eye damage/eye irritation

Remarks : Causes serious eye irritation

(Merck, 2018; Ver 1.1)

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

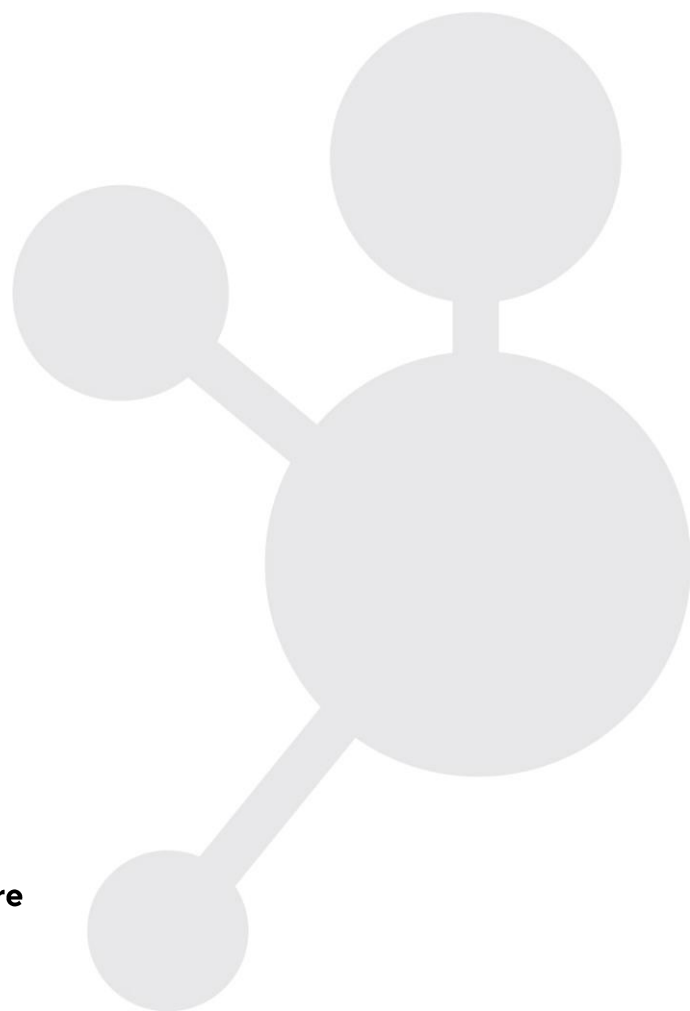
No data available

Specific target organ toxicity – repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Target organs: hearing organs

(Merck, 2018; Ver 1.1)





Aspiration hazard

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

(Merck, 2018; Ver 1.1)

11.2 Additional Information

Remarks : Exposure may enhance the toxicity of other materials, Classifications by other authorities under varying regulatory frameworks may exist.

Section 12 : ECOLOGY INFORMATION

12.1 Ecotoxicity

Toxicity to fish	LC50 - Fish - 2.6-8.4 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna - 1-4.7 mg/l - 48 h
Toxicity to algae	EC50 - Freshwater algae - 1.3 mg/L - 72 h
Toxicity to microorganisms	NOEC - microorganisms - 16 mg/L - 28 d

(ECHA)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

(Merck, 2018; Ver 1.1)



12.6 Other adverse effects

Avoid discharged into environment.

Section 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment method

Product

Waste material must be disposed according to national and local regulations. Keep the chemicals in its specific waste container according to the waste classification.

According to Quality Environment Regulation (Scheduled Waste) 2005, waste need to be sent to designated premise for recycle, treatment or disposal. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14 : TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1307	IMDG: 1307	IATA-DGR: 1307
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14.2 UN proper shipping name

ADR/RID:	XYLENES SOLUTION
IMDG:	XYLENES SOLUTION
IATA-DGR:	XYLENES SOLUTION

14.3 Transport hazard class(es)

ADR/RID: 3	IMDG: 3	IATA-DGR: 3
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14.4 Packaging group

ADR/RID: III	IMDG: III	IATA-DGR: III
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14.5 Environmental hazards

ADR/RID: no	IMDG Marine pollutant: no	IATA-DGR: no
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14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Yes.

Tunnel restriction code: D/E

(Merck, 2018; Ver 1.1)

14.7 Special precautions for user

No data available

Section 15 : REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

All national and local regulations, including Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013, if applicable to the use, should be observed.

Storage class 3.

Section 16 : OTHER INFORMATION

This information is based on present level of our knowledge, however, this shall not constitute a guarantee product features and shall not establish a legally valid contractual relationship.

Abbreviations:

ADR : European agreement concerning the international carriage of dangerous goods by road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association

ICAO : International Civil Aviation Organization

RID : Regulations concerning the International Carriage of Dangerous goods by rail.



Notice to reader

The information contained in this Safety Data Sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the products and should not be construed as any guarantee of technical performance or suitability for particular application.

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