

SAFETY DATA SHEET

Version 1 of 1 • Print date 27.06.2023

050 Xylene 100%

1. SUBSTANCE AND COMPANY IDENTIFICATION

Substance Identification:

Synonym

Recommended use:

Restriction on use:

Supplier:

Emergency Telephone Numbers:

Pure Xylene 100%

Methyl toluene; Xylol; Dimethylbenzene

Laboratory chemical.

Laboratory and analytical use.

Industrial use.

Professional use.

Do not use for products in contact with foodstuff.

Do not use for private purposes.

iSolvents

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Rapid Spill Response 0800172743

2. HAZARD IDENTIFICATION

Classification according to SANS10228

Hazard class	Category	Hazard class and category	Hazard statement
Flammable liquid	3	Flammable Liquid 2	H226
Acute toxicity (dermal)	4	Acute toxicity 4	H312
Acute toxicity (inhalation)	4	Acute toxicity 4	H332
Skin irritation	2	Skin irritant 2	H315
Serious eye irritation	2	Eye Irritant 2	H319
Specific target organ toxicity – respiratory tract irritation	3	STOT – single exposure	H335
Specific target organ toxicity – repeated exposure	2	STOT – repeated exposure	H373
Aspiration hazard	1	Aspiration toxicity	H304
Environmental hazard	3	Environmental hazard 3	H412

The most important adverse physical hazard, human health hazard and environmental hazard

The product is combustible and can be ignited by potential ignition sources

The product is toxic when taken into the body

Label elements according to the Global Harmonized System

Signal word

Danger

Pictograms

GHS08, GHS02, GHS07



Hazard statements

H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312+H332	Harmful if in contact with skin or if inhaled
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs (central nervous system, liver, kidney) through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

Precautionary statements

Prevention statements

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking
P240+P241+P242+P243	Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take precautionary measures against static discharge.
P260+P264+P265	Do not breathe gas/vapours. Wash hands thoroughly after handling. Do not touch eyes.
P271+P273	Use only outdoors or in a well-ventilated area. Avoid release into the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P403+P233+P235	Store in a well-ventilated space. Keep container tightly closed. Keep cool.

Response statements

P301+P316+P331	IF SWALLOWED: Get emergency medical help immediately. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN: Take off all contaminated clothing immediately. Rinse skin with water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P332+P317	If eye irritation persists and skin irritation occurs: Get emergency medical help.
P319	Get medical help if you feel unwell
P370+P378	In case of fire: Use dry powder or dry sand to extinguish.
P501	Dispose of contents and container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance	Chemical identity	Common name	EC-No	CAS-No	Index-No	Reach Reg. No
1) 100% volume	Xylene	Dimethylbenzol	215-535-7	1330-20-7	-	-

4. FIRST AID

Eye Contact

Immediately irrigate with clean, fresh water whilst holding the eyelids apart, for at least 10 minutes. If eye irritation persists consult an ophthalmologist.

Inhalation

Provide fresh air. If the person is not breathing give artificial respiration if possible. In cases of doubt or if symptoms persist seek medical advice.

Ingestion

Call a physician immediately. Do not induce vomiting. If vomiting occurs have victim lean forward and observe aspiration hazard.

Skin contact

Rinse skin with water or shower. In case of skin irritation, consult a physician.

Notable symptoms, acute and delayed

Irritation, Nausea, Vomiting, Abdominal pain, Breathing difficulties, Vertigo, Drowsiness, Narcosis, Loss of righting reflex, and ataxia

Further medical remarks

No known systemic effects. No specific antidote treatment. The only delayed effect can be local tissue damage.

5. FIRE FIGHTING

Extinguishing media

Suitable extinguishing media

Class B fire extinguishers, carbon dioxide (CO₂) fire extinguishers, dry extinguishing powder, BC-powder, alcohol resistant foam, water spray.

Unsuitable extinguishing media

Water jet

Special hazards arising from the substance

Combustible. In the case of insufficient ventilation it may form explosive vapour mixtures with the air. Vapours are heavier than air so it spreads along the floors. Trenches, conduits and shafts are prone to the presence of flammable substances.

Hazardous combustion products

May liberate Carbon monoxide and Carbon dioxide

Special protective equipment and precautions for fire-fighters

In the case of fire or explosions do not breathe in the fumes. Fight fire with the normal precautions from a reasonable distance. Wear self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel
Avoid contact with skin, eyes and clothes. Do not breathe in vapour or spray.
Avoid sources of ignition.

Environmental precautions:

Keep away from drains, surface, and ground water. Danger of explosion.

Methods and material for containment and cleaning up:

1. Wear full protective clothing
2. Contain a spill by covering drains
3. Absorb with liquid-binding material like sand or universal binding agents that are inert.
4. Place spillage in appropriate disposal container

5. Ventilate affected area

7. HANDLING AND STORAGE

Precautions for safe handling:

Measures to prevent fire as well as aerosol generation

Provide sufficient ventilation. Keep away from sources of ignition. No smoking. Take precautionary measures against static discharge. Due to danger of explosion always prevent leakage of vapours into ditches.

Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feed when handling.

Conditions for safe storage, including incompatibilities:

Safe storage

Store in a well-ventilated place. Use local and general ventilation. Keep container tightly closed. Keep away from heat, sparks and flames.

Storage temperature

Between 15-25°C

Incompatible substances or mixtures

Keep away from strong oxidizing agents and strong acids.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Control parameters

Occupational Exposure Limit Values				
Country	Name of agent	CAS No	Time Weighted Average (ppm)	Short-term Exposure Limits (ppm)
RSA	Xylene	1330-20-7	100	150

TWA: Time-weighted average (long-term exposure limit) measured in relation to a reference period of 8 hours.

STEL: Short-term exposure limit above which exposure should not occur within a 15-minute period.

Individual protection measures

Protective equipment

Eye protection: safety goggles with side protection

Skin protection: suitable gloves made out of butyl rubber of 0.7mm thickness

Wear flame retardant protective clothing

Respiratory protection: wear N95 masks to prevent breathing in the product

Other protection measures

Take recovery periods for skin regeneration if the skin is damaged. Use creams as a barrier to exposure

Environmental exposure Control

Keep away from drains and ground water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid
Colour	Colourless
Odour	Alcohol (sweet)
pH	7 (20°C)
Melting point / freezing point	-114°C
Initial boiling point and boiling range	78°C at 1.013 hPa
Flash point	12°C (closed cup)
Evaporation rate	2.5 times higher than water
Flammability	Flammable liquid in accordance with GHS criteria
Upper and lower explosive limits	27,7 vol% (UEL) and 3,1 vol% (LEL)
Vapour pressure	59 hPa at 20°C
Vapour density	1.59 (heavier than air)
Solubilities	≥1 gram per litre at 20°C
Partition coefficient	-0,31 (log value)
Auto-ignition temperature	365°C
Decomposition temperature	975 – 1400°C
Viscosity	1.1 cP at 25°C

10. STABILITY AND REACTIVITY

Reactivity

It's a reactive substance. There is risk of ignition, especially if heated. Vapours may form explosive mixtures with air.

Chemical stability

The chemical is stable under normal temperature and pressure, in ambient, anticipated storage and handling conditions.

Possibility of hazardous reactions

None under normal processing

Conditions to avoid

Incompatible products. Excess heat, hot surfaces, sparks and open flames. No smoking

Incompatible materials

Strong oxidizing agents and strong acids

Hazardous decomposition products

Carbon monoxide and Carbon dioxide

11. TOXICOLOGY

Hazard classification according to GHS

Toxicity	
Exposure route	Hazard category
Contact with skin	2
Inhalation of vapours	2
Ingested	1
Repeated exposure	2

Acute toxicity

Harmful in contact with skin.
Harmful if inhaled.
Harmful if swallowed

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser

Germ cell mutagenicity

Shall not be classified as germ cell mutagen

Carcinogenicity

Shall not be classified as carcinogenic

Reproductive toxicity

Shall not be classified as a reproductive toxicant

Single exposure for specific target organ

May cause respiratory irritation

Repeated exposure for specific target organ

May cause damage to organs (central nervous system, liver and kidney) through prolonged or repeated exposure

Aspiration hazard

May be fatal if swallowed and enter airways.

Endocrine disrupting properties

None

Symptoms related to the physical, chemical and toxicological characteristics	
If swallowed	Vomiting, nausea, aspiration hazard
If in eyes	Causes serious eye irritation
If inhaled	Vertigo, dizziness, unconsciousness, headache, irritation to respiratory tract, coughing, dyspnoea.
If on skin	Prolonged or repeated skin contact may cause removal of natural fat from the skin, causing skin inflammation and dermatitis.

12. ECOLOGY

Toxicity classification according to GHS

Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aquatic toxicity		
Toxicity value	Species	Exposure time
16.1mg per litre	fish	96 hours
3.2mg per litre	Aquatic invertebrates	48 hours
4.7mg per litre	algae	72 hours

Persistence and degradability

The substance is insoluble on water but unlikely to persist

Bio-accumulative potential

No significant data on this

Mobility in soil

No significant data on this

Endocrine disrupting properties

None

13. DISPOSAL CONSIDERATIONS

Waste residues

The material, and its waste residues, and its container must be disposed of as hazardous waste in accordance with SANS10234.

Safe Handling

Do not empty into drains. Contain in glass bottles or aluminium cans for disposal. Wear Personal Protective Equipment when handling and disposing the waste. Xylene waste must be kept separate and handled by local and national waste management facilities.

Methods of disposal

The waste drums must be given a serial number to identify it, its location, and its contents. Xylene waste can be landfilled or treated.

Contaminated packaging

Dispose of with the waste.

14. TRANSPORT

Road, sea and air shipping codes

ADRRID – transport of dangerous goods by road

IMDG-Code – International Maritime Dangerous Goods for Marine environment

ICAO-TI – International Civil Aviation Organization

UN number or ID number

ADRRID

IMDG-Code

ICAO-TI

UN1307

UN1307

UN1307

UN proper shipping name

ADRRID

IMDG-Code

ICAO-TI

XYLENES

XYLENES

xlenes

Transport hazard class(es)

ADRRID

IMDG-Code

ICAO-TI

3

3

3

Packaging group

ADRRID

IMDG-Code

ICAO-TI

III

III

III

Danger label(s)



15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

Regulatory reference

SANS 10234; SANS 11014; SANS 10228; SANS 10229; SANS10231/2/3; Occupational Health and Safety Act 85 of 1993; National Road Traffic Act 93 of 1996

16. OTHER

Labelling according to SA directives.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and is not to be considered a warranty or quality specification. The information

relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.

Issue date: 24/01/2024

Revision date: 23/01/2027

Full text of H-statement

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects