



# m-XYLENE CAS NO 108-38-3

# MATERIAL SAFETY DATA SHEET SDS/MSDS

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : m-Xylene

CAS-No. : 108-38-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House New Delhi -110002

INDIA

Telephone : +91 11 49404040

Email : <a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 3), H226 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312

Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Aspiration hazard (Category 1), H304 Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways. H312 + H332 Harmful in contact with skin or if inhaled H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing vapours.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms: 1,3-Dimethylbenzene

Formula : C<sub>8</sub>H<sub>10</sub>

Molecular weight : 106.17 g/mol

CAS-No. : 108-38-3

EC-No. : 203-576-3

Index-No. : 601-022-00-9

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

m-Xylene

CAS-No. 108-38-3 Flam. Liq. 3; Acute Tox. 4; <= 100 %

EC-No. 203-576-3 Skin Irrit. 2; Eye Irrit. 2; STOT Index-No. 601-022-00-9 SE 3; Asp. Tox. 1; Aquatic Chronic 3: H226 H332 H312

Chronic 3; H226, H332, H312, H315, H319, H335, H304,

H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

#### General advice

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

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. 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

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. 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.

For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### 6.3 Methods and materials 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 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Flammable liquids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### 8.2 Exposure controls

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses 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. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, 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

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid Colour: colourless
b)	Odour	No data available
c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing	Melting point/range: -48 °C - lit.

e) Melting point/freezing point

Initial boiling point and f)

138 - 139 °C - lit. boiling range

25.0 °C - closed cup g) Flash point h) Evaporation rate No data available

No data available i) Flammability (solid, gas) Upper/lower Upper explosion limit: 7 %(V)

flammability or explosive limits Lower explosion limit: 1.1 %(V)

Vapour pressure 6.0 mmHg at 20.0 °C

16.0 mmHg at 37.7 °C

I) Vapour density No data available 0.868 g/mL at 25 °C m) Relative density n) Water solubility No data available

o) Partition coefficient: noctanol/water

log Pow: 3.2 at 20 °C

465.0 °C p) Auto-ignition temperature 528.0 °C

q) Decomposition temperature

No data available

Viscosity No data available r) Explosive properties No data available

#### 9.2 Other safety information

No data available

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

#### **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - male - 6,602 mg/kg(m-

Xylene) (OECD Test Guideline 401)

LC50 Inhalation - Rat - male - 4 h - 6700 ppm(m-Xylene)

(Directive 67/548/EEC, Annex V, B.2.)

LD50 Dermal - Rabbit - male - 12,126 mg/kg(m-Xylene)

Dermal: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)(m-Xylene)

#### Skin corrosion/irritation

Skin - Rabbit(m-Xylene)
Result: Skin irritation - 24 h

#### Serious eye damage/eye irritation

Eyes - Rabbit(m-Xylene)

Result: Severe eye irritation - 24 h

#### Respiratory or skin sensitisation

- Mouse(m-Xylene)

Result: Does not cause skin sensitisation.

(OECD Test Guideline 429)

# Germ cell mutagenicity

No data available(m-Xylene)

#### Carcinogenicity

This product is or contains a component that is not classifiable as to its classification.(m-Xylene)

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (m-Xylene)

#### Reproductive toxicity

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.(m-Xylene)

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.(m-Xylene)

#### Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

May be fatal if swallowed and enters airways.(m-Xylene)

#### **Additional Information**

RTECS: ZE2275000

Liver injury may occur., Kidney injury may occur., Blood disorders, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance(m-Xylene) Kidney - (m-Xylene)

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish mortality LC50 - Fish - 11.23 mg/l - 96 h(m-Xylene)

(OECD Test Guideline 203)

Toxicity to daphnia and

other aquatic Remarks: No data available(m-Xylene)

invertebrates

Toxicity to algae Remarks: No data available(m-Xylene)

#### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

#### 12.4 Mobility in soil

No data available(m-Xylene)

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Harmful to aquatic life with long lasting effects.

No data available

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable.

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: 1307

# 14.2 UN proper shipping name

ADR/RID: XYLENES IMDG: XYLENES IATA: Xylenes

#### 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

#### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

No data available

#### **SECTION 15: Regulatory information**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H312 + H332 H315 H319 H332 H335 H412	Harmful in contact with skin or if inhaled Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Harmful to aquatic life with long lasting effects.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.