

## SAFETY DATA SHEET

Version 5.4  
Revision Date 06/02/2016  
Print Date 10/17/2019

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1. PRODUCT AND COMPANY IDENTIFICATION

## 1.1 Product identifiers

Product name : *m*-Xylene-(dimethyl-d<sub>6</sub>)

Product Number : 587915  
Brand : Aldrich  
Index-No. : 601-022-00-9

CAS-No. : 29636-65-5

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

Identified uses : Laboratory chemicals, Synthesis of substances

## 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +1 800-325-5832  
Fax : +1 800-325-5052

## 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

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2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 3), H226  
Acute toxicity, Inhalation (Category 4), H332  
Acute toxicity, Dermal (Category 4), H312  
Skin irritation (Category 2), H315

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

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word : Warning

Hazard statement(s)

H226 : Flammable liquid and vapour.  
H312 + H332 : Harmful in contact with skin or if inhaled  
H315 : Causes skin irritation.

Precautionary statement(s)

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233 : Keep container tightly closed.  
P240 : Ground/bond container and receiving equipment.  
P241 : Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 : Use only non-sparking tools.

|                    |  |
|--------------------|--|
| P243               | Take precautionary measures against static discharge.  |
| P261               | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.   |
| P264               | Wash skin thoroughly after handling.   |
| P271               | Use only outdoors or in a well-ventilated area.  |
| P280               | Wear protective gloves/ protective clothing/ eye protection/ face protection.                                |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340        | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.             |
| P312               | Call a POISON CENTER/doctor if you feel unwell.  |
| P322               | Specific measures (see supplemental first aid instructions on this label).                                   |
| P332 + P313        | If skin irritation occurs: Get medical advice/ attention.  |
| P362               | Take off contaminated clothing and wash before reuse.  |
| P370 + P378        | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.                        |
| P403 + P235        | Store in a well-ventilated place. Keep cool.   |
| P501               | Dispose of contents/ container to an approved waste disposal plant.  |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical characterization : Isotopically labeled  
Synonyms : 1,3-Dimethyl-d<sub>6</sub>-benzene

Formula : C<sub>8</sub>D<sub>6</sub>H<sub>4</sub>  
Molecular weight : 112.20 g/mol  
CAS-No. : 29636-65-5  
Index-No. : 601-022-00-9

#### Hazardous components

| Component                   | Classification   | Concentration |
|-----------------------------|--|---------------|
| <b>m-Xylene-dimethyl-d6</b> |  |               |
|                             | Flam. Liq. 3; Acute Tox. 4;<br>Skin Irrit. 2; H226, H312 +<br>H332, H315 | <= 100 %      |

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

## 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. Move out of dangerous area.

#### 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

Flush eyes with water as a precaution.

#### 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

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## 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

No data available

### 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.

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## 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. 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.

### 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.

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## 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

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.

Store under inert gas. hygroscopic

### 7.3 Specific end use(s)

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

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### **Components with workplace control parameters**

| Component            | CAS-No.    | Value  | Control parameters | Basis                                   |
|----------------------|------------|--|--------------------|---|
| m-Xylene-dimethyl-d6 | 29636-65-5 | TWA  | 100.000000 ppm     | USA. ACGIH Threshold Limit Values (TLV) |
|                      | Remarks    | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen |                    |   |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  | STEL   | 150.000000<br>ppm                        | USA. ACGIH Threshold Limit Values (TLV)  |
|  |  | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen             |  |  |
|  |  | TWA  | 100.000000<br>ppm<br>435.000000<br>mg/m3 | USA. NIOSH Recommended Exposure Limits   |
|  |  | ST   | 150.000000<br>ppm<br>655.000000<br>mg/m3 | USA. NIOSH Recommended Exposure Limits   |
|  |  | TWA  | 100.000000<br>ppm<br>435.000000<br>mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
|  |  | The value in mg/m3 is approximate.   |  |  |
|  |  | TWA  | 100.000000<br>ppm                        | USA. ACGIH Threshold Limit Values (TLV)  |
|  |  | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen |  |  |
|  |  | STEL   | 150.000000<br>ppm                        | USA. ACGIH Threshold Limit Values (TLV)  |
|  |  | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen |  |  |
|  |  | TWA  | 100 ppm                                  | USA. ACGIH Threshold Limit Values (TLV)  |
|  |  | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen |  |  |
|  |  | STEL   | 150 ppm                                  | USA. ACGIH Threshold Limit Values (TLV)  |
|  |  | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen |  |  |
|  |  | TWA  | 100 ppm<br>435 mg/m3                     | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
|  |  | The value in mg/m3 is approximate.   |  |  |

**Biological occupational exposure limits**

| Component            | CAS-No.    | Parameters   | Value             | Biological specimen | Basis                                     |
|----------------------|------------|--|-------------------|---------------------|---|
| m-Xylene-dimethyl-d6 | 29636-65-5 | Methylhippuric acids                                     | 1.5g/g creatinine | Urine               | ACGIH - Biological Exposure Indices (BEI) |
|                      | Remarks    | End of shift (As soon as possible after exposure ceases) |                   |                     |   |
|                      |            | Methylhippuric acids                                     | 1,500.0000 mg/g   | Urine               | ACGIH - Biological Exposure Indices (BEI) |
|                      |            | End of shift (As soon as possible after exposure ceases) |                   |                     |   |

**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 a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of 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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

- |  |   |
|--|---|
| a) Appearance                              | Form: liquid<br>Colour: colourless          |
| b) Odour                                   | No data available                           |
| c) Odour Threshold                         | No data available                           |
| d) pH                                      | No data available                           |
| e) Melting point/freezing point            | Melting point/range: -48 °C (-54 °F) - lit. |
| f) Initial boiling point and boiling range | 138 - 139 °C (280 - 282 °F) - lit.          |
| g) Flash point                             | 31 °C (88 °F) - closed cup                  |
| h) Evaporation rate                        | No data available                           |
| i) Flammability (solid, gas)               | No data available                           |
| j) Upper/lower                             | No data available                           |

flammability or  
explosive limits

- |   |  |
|---|--|
| k) Vapour pressure                        | No data available  |
| l) Vapour density                         | No data available  |
| m) Relative density                       | 0.916 g/mL at 25 °C (77 °F) 0.916 g/cm <sup>3</sup> at 25 °C (77 °F) |
| n) Water solubility                       | No data available  |
| o) Partition coefficient: n-octanol/water | No data available  |
| p) Auto-ignition temperature              | No data available  |
| q) Decomposition temperature              | No data available  |
| r) Viscosity                              | No data available  |
| s) Explosive properties                   | No data available  |
| t) Oxidizing properties                   | No data available  |

## 9.2 Other safety information

No data available

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## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

No data available

### 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

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

Inhalation: No data available

Dermal: No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

#### Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (m-Xylene-dimethyl-d6)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### **Reproductive toxicity**

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure**

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: Not available

narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur., Blood disorders

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

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## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

No data available

### **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 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### **12.6 Other adverse effects**

No data available

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## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### **Contaminated packaging**

Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 1307      Class: 3      Packing group: III  
Proper shipping name: Xylenes  
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

### IMDG

UN number: 1307      Class: 3      Packing group: III      EMS-No: F-E, S-D  
Proper shipping name: XYLENES

### IATA

UN number: 1307      Class: 3      Packing group: III  
Proper shipping name: Xylenes

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## 15. REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

|                      | CAS-No.    | Revision Date |
|----------------------|------------|---------------|
| m-Xylene-dimethyl-d6 | 29636-65-5 | 2007-07-01    |

### SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

### Massachusetts Right To Know Components

|                      | CAS-No.    | Revision Date |
|----------------------|------------|---------------|
| m-Xylene-dimethyl-d6 | 29636-65-5 | 2007-07-01    |

### Pennsylvania Right To Know Components

|                      | CAS-No.    | Revision Date |
|----------------------|------------|---------------|
| m-Xylene-dimethyl-d6 | 29636-65-5 | 2007-07-01    |

### New Jersey Right To Know Components

|                      | CAS-No.    | Revision Date |
|----------------------|------------|---------------|
| m-Xylene-dimethyl-d6 | 29636-65-5 | 2007-07-01    |

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

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

|             |  |
|-------------|--|
| Acute Tox.  | Acute toxicity                             |
| Flam. Liq.  | Flammable liquids                          |
| H226        | Flammable liquid and vapour.               |
| H312        | Harmful in contact with skin.              |
| H312 + H332 | Harmful in contact with skin or if inhaled |
| H315        | Causes skin irritation.                    |
| H332        | Harmful if inhaled.                        |

### HMIS Rating

Health hazard: 2



|                        |   |
|------------------------|---|
| Chronic Health Hazard: | * |
| Flammability:          | 3 |
| Physical Hazard        | 0 |

**NFPA Rating**

|                    |   |
|--------------------|---|
| Health hazard:     | 2 |
| Fire Hazard:       | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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**Preparation Information**

Sigma-Aldrich Corporation  
Product Safety – Americas Region  
1-800-521-8956

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