

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006  
(amended by Regulation (EU) 2015/830)

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**Toluene-d8**

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***SECTION 1: Identification of the substance/mixture and of the company/undertaking*****1.1. Product identifier**

<b>Product name</b>	Toluene-d8
<b>CAS-No.</b>	2037-26-5
<b>EC-No.</b>	218-009-5
<b>Product code</b>	None.

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

<b>Use of the Substance/Mixture</b>	Solvent for NMR spectroscopy For industrial application only.
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**1.3. Details of the supplier of the safety data sheet**

<b>Company/Undertaking Identification</b>	Zeochem AG, <a href="http://www.zeochem.ch">www.zeochem.ch</a> Joweid 5, 8630 Rüti, Schweiz Tel.: +41 44 922 93 93 E-Mail: <a href="mailto:info@zeochem.ch">info@zeochem.ch</a>
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<b>1.4. Emergency telephone number</b>	Tox-Zentrum Zürich : 145 / +41 44 251 51 51 [24h/7d]
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<b>Issuing date</b>	05.10.2018
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<b>Version</b>	GHS 5 (Previous versions: GHS 4)
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Cat. 2, H315  
Specific target organ toxicity (repeated exposure, inhalation), Cat. 2, H373  
Aspiration hazard, Cat. 1, H304  
Specific target organ toxicity (single exposure, narcotic effects), Cat. 3, H336  
Flammable liquids, Cat. 2, H225

Additional information

For the full text of the phrases mentioned in this Section, see Section 16.

### 2.2. Label elements



Signal Word

Danger

Hazard Statements

H225: Highly flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H315: Causes skin irritation.  
H336: May cause drowsiness or dizziness.  
H373: May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

P210b: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P243: Take precautionary measures against static discharge.  
P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264a: Wash skin thoroughly after handling.  
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P314: Get medical advice/ attention if you feel unwell.  
P331: Do NOT induce vomiting.  
P332+P313: If skin irritation occurs: Get medical advice/ attention.  
P403+P235: Store in a well-ventilated place. Keep cool.  
P501: Dispose of contents/ container to an approved waste disposal plant.

Supplemental information

None.

Product identifier

Toluene-d8, CAS-No. 2037-26-5, EC-No. 218-009-5

### 2.3. Other hazards

None known.

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

### **3.1. Substances**

<b>Components</b>		<b>Product identifier</b>
Toluene-d8	> 90%	CAS-No.: 2037-26-5 EC-No.: 218-009-5

For the full text of the phrases mentioned in this Section, see Section 16.

**Hazardous impurities** None known.

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

### **4.1. Description of first aid measures**

<b>Inhalation</b>	Move to fresh air. Consult a physician after significant exposure.
<b>Skin contact</b>	Wash with water and soap as a precaution.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. Consult a physician if necessary.

**4.2. Most important symptoms and effects, both acute and delayed** None known.

**4.3. Indication of any immediate medical attention and special treatment needed** None known.

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

**Suitable extinguishing media** Use dry chemical, CO<sub>2</sub>, water spray or alcohol foam.

**Extinguishing media which must not be used for safety reasons** High volume water jet.

**5.2. Special hazards arising from the substance or mixture** Solvents may produce excessive pressure under fire-conditions. Sealed containers may rupture and ignite. Cool containers / tanks with water spray. Burning produces irritant fumes.

### **5.3. Advice for firefighters**

**Special protective equipment for firefighters** Standard procedure for chemical fires.

## Specific methods

Do not use a solid water stream as it may scatter and spread fire.

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

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

#### **Advice for non-emergency personnel**

Remove all sources of ignition. Pay attention to flashback.

#### **Advice for emergency responders**

Handle in accordance with good industrial hygiene and safety practice.

### **6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

### **6.3. Methods and material for containment and cleaning up**

Clean up promptly by sweeping or vacuum. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.

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

Keep containers tightly closed in a dry, cool and well-ventilated place.

### **7.3. Specific end use(s)**

No information available.

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

### **8.1. Control parameters**

#### **Exposure limit(s)**

MAK (Maximale Arbeitsplatzkonzentration): 50 ppm.

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Avoid contact with skin, eyes and clothing.

#### **Personal protection equipment**

##### *Respiratory protection*

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

##### *Hand protection*

Gloves made of VITON.

<i>Eye protection</i>	Safety glasses.
<i>Skin and body protection</i>	Wear as appropriate: Solvent-resistant apron and boots.
<i>Thermal hazards</i>	No special measures required.
<b>Environmental exposure controls</b>	No special measures required.

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

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Aromatic.
<b>Odour Threshold</b>	Not determined.
<b>pH:</b>	n.a.
<b>Melting point/range:</b>	-95°C
<b>Boiling point/range:</b>	111°C
<b>Flash point:</b>	6°C
<b>Evaporation Rate:</b>	Not determined.
<b>Flammability:</b>	Not determined.
<b>Explosion limits:</b>	7.8% / 1.1%
<b>Vapour pressure:</b>	29 mbar (20°C)
<b>Vapor density:</b>	3.18
<b>Relative density:</b>	0.94 g/ml
<b>Water solubility:</b>	470 mg/l (20°C)
<b>Partition coefficient (n-octanol/water):</b>	2.73
<b>Autoignition temperature:</b>	535°C
<b>Decomposition temperature:</b>	Not determined.
<b>Viscosity:</b>	Not determined.
<b>Explosive properties:</b>	liquid, flammable
<b>Oxidising properties:</b>	None

### **9.2. Other information**

<b>General Product Characteristics</b>	No information available.
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## **SECTION 10: Stability and reactivity**

<b>10.1. Reactivity</b>	No information available.
<b>10.2. Chemical stability</b>	No decomposition if used as directed.
<b>10.3. Possibility of hazardous reactions</b>	No information available.
<b>10.4. Conditions to avoid</b>	Heating in air.
<b>10.5. Incompatible materials</b>	Incompatible with oxidizing agents. Halogens and halogen compounds

**10.6. Hazardous decomposition products**      None under normal use.

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

### **11.1. Information on toxicological effects**

<b>Acute toxicity</b>	LD50/oral/rat = 636 mg/kg. LD50/dermal/rabbit = 12200 mg/kg. LC50/inhalation/4 h/rat = 49 mg/l.
<b>Skin corrosion/irritation</b>	No data available.
<b>Serious eye damage/eye irritation</b>	No data available.
<b>Respiratory / Skin Sensitisation</b>	None.
<b>Carcinogenicity</b>	Animal testing did not show any carcinogenic effects.
<b>Germ cell mutagenicity</b>	In vivo tests did not show mutagenic effects.
<b>Reproductive toxicity</b>	Damage to fetus unlikely if the occupational exposure limit values are not exceeded.
<b>Specific target organ toxicity (single exposure)</b>	No data available.
<b>Specific target organ toxicity (repeated exposure)</b>	No data available.
<b>Aspiration hazard</b>	No data available.
<b>Human experience</b>	No data available.

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

<b>12.1. Toxicity</b>	LC50/96h/fish = 31.7 mg/l. EC50/48h/daphnia = 92 mg/l. EC50/72h/algae = 12.5 mg/l.
<b>12.2. Persistence and degradability</b>	The solvent is biodegradable.
<b>12.3. Bioaccumulative potential</b>	Does not bioaccumulate.
<b>12.4. Mobility in soil</b>	No data available.
<b>12.5. Results of PBT and vPvB assessment</b>	No information available.
<b>12.6. Other adverse effects</b>	No information available.

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## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

<b>Waste from residues / unused products</b>	Can be incinerated, when in compliance with local regulations.
<b>Contaminated packaging</b>	Offer rinsed packaging material to local recycling facilities.

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## **SECTION 14: Transport information**

<b>ADR/RID</b>	UN 1294. Proper shipping name: TOLUENE. Class 3. Packing group II. ADR/RID-Labels 3. Classification code F1. Hazard identification no. 33. Limited quantity 1 L. Excepted quantity E2. Tunnel restriction code D/E
<b>IMDG</b>	UN 1294. Proper shipping name: TOLUENE. Class 3. Packing group II. IMDG-Labels 3. Limited quantity 1 L. Excepted quantity E2. EmS F-E, S-D. Marine pollutant: No.
<b>IATA</b>	UN 1294. Proper shipping name: Toluene. Class 3. Packing group II. IATA label 3. Packing instruction (passenger aircraft): 353 (5 L). Packing instruction (LQ): Y341 (1 L). Packing instruction (cargo aircraft): 364 (60 L).
<b>Inland navigation ADN</b>	UN 1294. Proper shipping name: TOLUENE. Class 3. Packing group II. ADN labels 3. Classification code F1. Limited quantity 1 L. Excepted quantity E2.
<b>Further Information</b>	None.

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## **SECTION 15: Regulatory information**

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

**Regulatory Information**                      The product is classified and labelled according to Regulation (EC) No. 1272/2008.

**15.2. Chemical safety assessment**                      Not required.

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## **SECTION 16: Other information**

**Key or legend to abbreviations and acronyms**                      CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)  
MAK: Occupational exposure limit.

**Full text of phrases referred to under sections 2 and 3**                      H225: Highly flammable liquid and vapour.  
H304: May be fatal if swallowed and enters airways.  
H315: Causes skin irritation.  
H336: May cause drowsiness or dizziness.  
H373: May cause damage to organs through prolonged or repeated exposure if inhaled.

**Further information**                      Take notice of the directions of use on the label.

**Disclaimer**                      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 a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.