

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Bromobenzene, 50 ml**

Print date: 14.04.2015

Product code: 9991160

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

Bromobenzene, 50 ml

CAS No: 108-86-1  
Index No: 602-060-00-9  
EC No: 203-623-8

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

Laboratory chemicals

**1.3. Details of the supplier of the safety data sheet****Seller**

Company name: CONATEX-DIDACTIC Lehrmittel GmbH  
Street: Im Forstgarten 1  
Place: D-66459 Kirkel  
Internet: www.conatex.com

**Supplier**

Company name: Carbolution Chemicals GmbH  
Street: Im Stadtwald, Gebäude A1.2  
Place: D-66123 Saarbrücken  
Contact person: Dr. Michael Bauer Telephone: +49 (0)681 302-71232  
e-mail: michael.bauer@carbolution-chemicals.de  
Internet: www.carbolution-chemicals.de

**1.4. Emergency telephone number:** +49 (0)681 302-71232**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: Xi - Irritant, N - Dangerous for the environment  
R phrases:  
Flammable.  
Irritating to skin.  
Toxic to aquatic organisms.  
May cause long-term adverse effects in the aquatic environment.

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

Hazard categories:  
Flammable liquid: Flam. Liq. 3  
Skin corrosion/irritation: Skin Irrit. 2  
Hazardous to the aquatic environment: Aquatic Chronic 2  
Hazard Statements:  
Flammable liquid and vapour.  
Causes skin irritation.  
Toxic to aquatic life with long lasting effects.

**2.2. Label elements**

Signal word: Warning  
Pictograms: GHS02-GHS07-GHS09

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#### Hazard statements

H226 Flammable liquid and vapour.  
H315 Causes skin irritation.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P273 Avoid release to the environment.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: C<sub>6</sub>H<sub>5</sub>Br  
Molecular weight: 157,01

#### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
203-623-8	bromobenzene	100 %
108-86-1	Xi - Irritant, N - Dangerous for the environment R10-38-51-53	
602-060-00-9	Flam. Liq. 3, Skin Irrit. 2, Aquatic Chronic 2; H226 H315 H411	

Full text of R-, H- and EUH-phrases: see section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### After inhalation

Provide fresh air.

##### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

##### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

##### After ingestion

Rinse mouth immediately and drink plenty of water.

#### 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

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

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

Combustible. Vapours can form explosive mixtures with air.

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

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### SECTION 6: Accidental release measures

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

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### **6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### SECTION 7: Handling and storage

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

##### **Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

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

##### **Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

##### **Advice on storage compatibility**

Do not store together with: Material, oxygen-rich, oxidizing. Pyrophoric or self-heating substances.

### SECTION 8: Exposure controls/personal protection

#### **8.1. Control parameters**

#### **8.2. Exposure controls**

##### **Protective and hygiene measures**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

##### **Eye/face protection**

Eye protection: Tightly sealed safety glasses. German Industry Norms (DIN) / European Norms (EN): DIN EN 166

##### **Hand protection**

Hand protection: Single-use gloves. Before using check leak tightness / impermeability. Use gloves only once. German Industry Norms (DIN) / European Norms (EN): DIN EN 374

##### **Skin protection**

Body protection: Lab apron. Only wear fitting, comfortable and clean protective clothing.

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#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Suitable respiratory protective equipment: particulates filter device (DIN EN 143).

### SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless
Odour:	No data available

#### Test method

pH-Value:	No data available
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#### Changes in the physical state

Melting point:	-31 °C
Initial boiling point and boiling range:	156 °C
Sublimation point:	No data available
Softening point:	No data available
Flash point:	51 °C

#### Flammability

Solid:	No data available
Gas:	No data available
Lower explosion limits:	6 vol. %
Upper explosion limits:	36,5 vol. %
Ignition temperature:	No data available

#### Auto-ignition temperature

Solid:	No data available
Gas:	566 °C

Vapour pressure: (at 25 °C)	5,3 hPa
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Vapour pressure: (at 40 °C)	13,3 hPa
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Density:	1,50 g/cm <sup>3</sup>
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Water solubility:	No data available
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Partition coefficient:	No data available
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Viscosity / dynamic:	No data available
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Viscosity / kinematic:	No data available
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Flow time:	No data available
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Vapour density:	No data available
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Evaporation rate:	No data available
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Solvent separation test:	No data available
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Solvent content:	No data available
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#### 9.2. Other information

Solid content:	No data available
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#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

No data available

##### 10.3. Possibility of hazardous reactions

No data available

##### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Ignition hazard. Vapours can form explosive mixtures with air.

##### 10.5. Incompatible materials

Oxidizing agents, strong.

##### 10.6. Hazardous decomposition products

No data available

#### SECTION 11: Toxicological information

##### 11.1. Information on toxicological effects

###### Toxicokinetics, metabolism and distribution

Toxicological data are not available.

###### Acute toxicity

Toxicological data are not available.

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
108-86-1	bromobenzene				
	oral	LD50	2380 mg/kg	Ratte	

###### Irritation and corrosivity

Causes skin irritation.

###### Sensitising effects

No data available

###### Severe effects after repeated or prolonged exposure

No data available

###### Carcinogenic/mutagenic/toxic effects for reproduction

Due to missing data no statement can be made whether the substance fulfills the criteria of CMR categories 1 or 2. Practical experiences do not give any evidence for CMR activity of categories 1 or 2.

###### Specific effects in experiment on an animal

No data available

###### Additional information on tests

This mixture is classified as hazardous according to 1999/45/EC.

###### Practical experience

###### Observations relevant to classification

No data available

#### SECTION 12: Ecological information

##### 12.1. Toxicity

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

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CAS No	Chemical name	Method	Dose	[h]   [d]	Species	Source
108-86-1	bromobenzene					
	Acute fish toxicity	LC50	5,6 mg/l	96 h	Fisch	

#### 12.2. Persistence and degradability

No data available

#### 12.3. Bioaccumulative potential

No data available

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
108-86-1	bromobenzene	2,99

#### 12.4. Mobility in soil

No data available

#### 12.5. Results of PBT and vPvB assessment

No data available

#### 12.6. Other adverse effects

No data available

#### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

##### Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals  
Classified as hazardous waste.

##### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances  
Classified as hazardous waste.

##### Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

##### 14.1. UN number:

UN 2514

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**14.2. UN proper shipping name:** BROMOBENZENE

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3

Classification code: F1

Limited quantity: 5 L

Transport category: 3

Hazard No: 30

Tunnel restriction code: D/E

**Other applicable information (land transport)**

E1

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 2514

**14.2. UN proper shipping name:** BROMOBENZENE

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3

Classification code: F1

Limited quantity: 5 L

**Other applicable information (inland waterways transport)**

E1

**Marine transport (IMDG)**

**14.1. UN number:** UN 2514

**14.2. UN proper shipping name:** BROMOBENZENE

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3

Marine pollutant: P

Special Provisions: -

Limited quantity: 5 L

EmS: F-E, S-D

**Other applicable information (marine transport)**

E1

**Air transport (ICAO)**

**14.1. UN number:** UN 2514

**14.2. UN proper shipping name:** BROMOBENZENE

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** III

Hazard label: 3

Limited quantity Passenger: 10 L

IATA-packing instructions - Passenger: 355

IATA-max. quantity - Passenger: 60 L

IATA-packing instructions - Cargo: 366

IATA-max. quantity - Cargo: 220 L

**Other applicable information (air transport)**

E1

: Y344

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**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS:       yes

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2004/42/EC (VOC):                       100 %

**Additional information**

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

**National regulatory information**

Water contaminating class (D):       3 - highly water contaminating

**SECTION 16: Other information****Relevant R-phrases (Number and full text)**

- |    |   |
|----|---|
| 10 | Flammable.  |
| 38 | Irritating to skin.   |
| 51 | Toxic to aquatic organisms.                                     |
| 53 | May cause long-term adverse effects in the aquatic environment. |

**Relevant H- and EUH-phrases (Number and full text)**

- |      |  |
|------|--|
| H226 | Flammable liquid and vapour.                     |
| H315 | Causes skin irritation.                          |
| H411 | Toxic to aquatic life with long lasting effects. |