

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Toluidine blue (C.I. 52040)

Revision date: 19.03.2025

Product code: 03842

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

### 1.1. Product identifier

Toluidine blue (C.I. 52040)

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

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

Company name:	AnalytiChem GmbH	
	ACD	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	

### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

### Further Information

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

This substance is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

### 2.2. Label elements

### 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Relevant ingredients

none (according to Regulation (EC) No 1907/2006 (REACH))

#### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

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#### SECTION 4: First aid measures

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

###### General information

No data available

###### After inhalation

Provide fresh air.

###### After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

Take off immediately all contaminated clothing and wash it before reuse.

###### After contact with eyes

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

###### After ingestion

Rinse mouth immediately and drink plenty of water.

Call a doctor if you feel unwell.

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

Methaemoglobinaemia, Headache

Cardiac arrhythmias, Blood pressure drop

Dyspnoea, Spasms

Cyanosis (blue coloured blood)

##### 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

Co-ordinate fire-fighting measures to the fire surroundings.

###### Unsuitable extinguishing media

no restriction

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

Combustible substance

Hazardous combustion products

In case of fire may be liberated:

Carbon monoxide, Carbon dioxide

Sulphur oxides

Nitrogen oxides (NOx)

##### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Avoid contact with skin, eyes and clothes.

###### Additional information

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

###### For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

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Remove persons to safety.  
Emergency procedures  
Consult an expert  
Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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

##### For containment

Cover drains.  
Prevent spread over a wide area (e.g. by containment or oil barriers).  
Collect in closed and suitable containers for disposal.  
Take up carefully when dry. Take up dust-free and set down dust-free.

##### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

##### Other information

Provide adequate ventilation.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 6.4. Reference to other sections

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Handle and open container with care. Keep container tightly closed.  
Provide adequate ventilation. Avoid dust formation. Do not breathe dust.  
Avoid contact with skin, eyes and clothes.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Wash contaminated clothing prior to re-use.  
Avoid dust formation. Do not breathe dust.  
Avoid contact with skin, eyes and clothes.  
The type of personal protection equipment has to be chosen based on the concentration and amount of the dangerous substance at the workplace.

#### Further information on handling

Wash contaminated clothing before reuse.  
Wash hands before breaks and after work.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed.

#### Hints on joint storage

No data available

#### Further information on storage conditions

Store in a dry place.  
storage temperature: +5°C - +30°C

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

Laboratory chemicals

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.2. Exposure controls

##### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

goggles

##### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L

Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L

Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

##### Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

##### Respiratory protection

Respiratory protection necessary at: dust formation

Filtering device with filter or ventilator filtering device of type: P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

##### Environmental exposure controls

Do not allow to enter into surface water or drains.

### SECTION 9: Physical and chemical properties

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

Physical state:	solid
Colour:	black
Odour:	characteristic weak

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Boiling point or initial boiling point and boiling range:	No data available
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value (at 25 °C):	2,8
Viscosity / kinematic:	No data available
Water solubility:	30 g/l
Solubility in other solvents	
No data available	
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Vapour pressure:	No data available
Density:	No data available
Bulk density:	410 kg/m <sup>3</sup>
Relative vapour density:	No data available

**9.2. Other information**

**Information with regard to physical hazard classes**

Explosive properties	
No data available	
Sustained combustibility:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
No data available	

**Other safety characteristics**

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	No data available
Solid content:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Viscosity / dynamic:	No data available
Flow time:	No data available

**Further Information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Danger of dust explosion.  
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

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Violent reaction with: Oxidising agent

#### **10.4. Conditions to avoid**

No data available

#### **10.5. Incompatible materials**

No data available

#### **10.6. Hazardous decomposition products**

In case of fire may be liberated:  
SECTION 5: Firefighting measures

#### **Further information**

No data available

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

#### **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

##### **Toxicokinetics, metabolism and distribution**

No data available

##### **Acute toxicity**

Based on available data, the classification criteria are not met.

##### **Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.  
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

##### **Sensitising effects**

Based on available data, the classification criteria are not met.

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

Germ cell mutagenicity: Based on available data, the classification criteria are not met.  
Carcinogenicity: Based on available data, the classification criteria are not met.  
Reproductive toxicity: Based on available data, the classification criteria are not met.

##### **STOT-single exposure**

Based on available data, the classification criteria are not met.

##### **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

##### **Aspiration hazard**

Based on available data, the classification criteria are not met.

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

No data available

##### **Additional information on tests**

No data available

##### **Practical experience**

No data available

#### **11.2. Information on other hazards**

##### **Other information**

No data available

##### **Further information**

Methaemoglobinaemia, Headache  
Cardiac arrhythmias, Blood pressure drop  
Dyspnoea, Spasms  
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### **SECTION 12: Ecological information**

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#### **12.1. Toxicity**

Based on available data, the classification criteria are not met.

#### **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**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

#### **12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

#### **12.7. Other adverse effects**

Discharge into the environment must be avoided.

#### **Further information**

Do not allow to enter into surface water or drains.

### SECTION 13: Disposal considerations

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

##### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
Do not empty into drains.

##### **Contaminated packaging**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number or ID number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### **Inland waterways transport (ADN)**

<b><u>14.1. UN number or ID number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### **Marine transport (IMDG)**

<b><u>14.1. UN number or ID number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### **Air transport (ICAO-TI/IATA-DGR)**

<b><u>14.1. UN number or ID number:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.2. UN proper shipping name:</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.3. Transport hazard class(es):</u></b>	No dangerous good in sense of this transport regulation.
<b><u>14.4. Packing group:</u></b>	No dangerous good in sense of this transport regulation.

#### **14.5. Environmental hazards**

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ENVIRONMENTALLY HAZARDOUS: No

#### **14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

#### **14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

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

##### **EU regulatory information**

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

##### **National regulatory information**

Water hazard class (D): 3 - highly hazardous to water

##### **Additional information**

No data available

### SECTION 16: Other information

#### **Changes**

This data sheet contains changes from the previous version in section(s): 1,3,4,5,7,8,9,10,11,12,15.

#### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Provide appropriate information, instructions and training to users