

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Crystal violet, 1 g**

Print date: 14.04.2015

Product code: 9991362

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

Crystal violet, 1 g

CAS No: 548-62-9  
Index No: 612-204-00-2  
EC No: 208-953-6

**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: C3 - Carc. Cat. 3, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment

R phrases:

Limited evidence of a carcinogenic effect.

Harmful if swallowed.

Risk of serious damage to eyes.

Very 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:

Carcinogenicity: Carc. 2

Acute toxicity: Acute Tox. 4

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Acute 1 (M-Factor = 1)

Hazardous to the aquatic environment: Aquatic Chronic 1 (M-Factor = 1)

Hazard Statements:

Suspected of causing cancer.

Harmful if swallowed.

Causes serious eye damage.

Very toxic to aquatic life.

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Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

##### Hazardous components which must be listed on the label

4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride, C.I. Basic Violet 3

Signal word:

Danger

Pictograms:

GHS05-GHS07-GHS08-GHS09



##### Hazard statements

- |      |   |
|------|---|
| H302 | Harmful if swallowed.                                 |
| H318 | Causes serious eye damage.                            |
| H351 | Suspected of causing cancer.                          |
| H410 | Very toxic to aquatic life with long lasting effects. |

##### Precautionary statements

- |                |  |
|----------------|--|
| P273           | Avoid release to the environment.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310           | Immediately call a POISON CENTER/doctor.   |
| P501           | Dispose of contents/container to ....  |

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Sum formula: C<sub>25</sub>H<sub>30</sub>CIN<sub>3</sub>

Molecular weight: MW: 407,98

##### 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]	
208-953-6	4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride, C.I. Basic Violet 3	100 %
548-62-9	Carc. Cat. 3, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R40-22-41-50-53	
612-204-00-2	Carc. 2, Acute Tox. 4, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H351 H302 H318 H400 H410	

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### After inhalation

Provide fresh air.

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**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Medical treatment necessary.

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

No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

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

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

Non-flammable.

**5.3. Advice for firefighters**

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

**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**

Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

**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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid generation of dust. Do not breathe dust.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed.

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#### Advice on storage compatibility

No special measures are necessary.

#### Further information on storage conditions

Store in a cool dry place.

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

none

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.2. Exposure controls

##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

##### 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

Suitable eye protection: goggles.

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Skin protection

Wear suitable protective clothing.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

### SECTION 9: Physical and chemical properties

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

Physical state: solid  
Colour: dark green

pH-Value (at 20 °C):

**Test method**  
3 10 g/l

##### Changes in the physical state

Melting point: 205 °C  
Initial boiling point and boiling range: not determined  
Flash point: not applicable

##### Flammability

Solid: not determined  
Gas: not applicable

Lower explosion limits:

not determined

Upper explosion limits:

not determined

##### Auto-ignition temperature

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Solid: not determined

Gas: not applicable

Decomposition temperature: not determined

#### Oxidizing properties

Not oxidizing.

Vapour pressure: not determined

Density (at 20 °C): 1,19 g/cm<sup>3</sup>

Water solubility:  
(at 27 °C) 50 g/L

#### Solubility in other solvents

not determined

Partition coefficient: 1,172

Vapour density: not determined

Evaporation rate: not determined

#### 9.2. Other information

Solid content: not determined

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

#### 10.4. Conditions to avoid

none

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
548-62-9	4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride, C.I. Basic Violet 3				
	oral	ATE	500 mg/kg		

##### Additional information on tests

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

### SECTION 12: Ecological information

#### 12.1. Toxicity

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

#### 12.2. Persistence and degradability

The product has not been tested.

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### 12.4. Mobility in soil

The product has not been tested.

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

The product has not been tested.

#### 12.6. Other adverse effects

No information 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.

##### 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)

<b><u>14.1. UN number:</u></b>	UN 3077
<b><u>14.2. UN proper shipping name:</u></b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b><u>14.3. Transport hazard class(es):</u></b>	9
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	9
Classification code:	M7
Special Provisions:	274 335 601
Limited quantity:	5 kg
Transport category:	3
Hazard No:	90
Tunnel restriction code:	E

#### Other applicable information (land transport)

E1

#### Inland waterways transport (ADN)

<b><u>14.1. UN number:</u></b>	UN 3077
<b><u>14.2. UN proper shipping name:</u></b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b><u>14.3. Transport hazard class(es):</u></b>	9
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	9
Classification code:	M7
Special Provisions:	274 335 601
Limited quantity:	5 kg

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

E1

#### Marine transport (IMDG)

<b>14.1. UN number:</b>	UN 3077
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	III
Hazard label:	9
Special Provisions:	274, 335, 966, 967
Limited quantity:	5 kg
EmS:	F-A, S-F

#### Other applicable information (marine transport)

E1

#### Air transport (ICAO)

<b>14.1. UN number:</b>	UN 3077
<b>14.2. UN proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	III
Hazard label:	9
Special Provisions:	A97 A158 A179
Limited quantity Passenger:	30 kg G
IATA-packing instructions - Passenger:	956
IATA-max. quantity - Passenger:	400 kg
IATA-packing instructions - Cargo:	956
IATA-max. quantity - Cargo:	400 kg

#### Other applicable information (air transport)

E1

: Y956

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

#### 14.6. Special precautions for user

No information available.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

##### EU regulatory information

##### Additional information

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

##### National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

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

#### 15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

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**SECTION 16: Other information****Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road )  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

**Relevant R-phrases (Number and full text)**

22	Harmful if swallowed.
40	Limited evidence of a carcinogenic effect.
41	Risk of serious damage to eyes.
50	Very toxic to aquatic organisms.
53	May cause long-term adverse effects in the aquatic environment.

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

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**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.