



according to UK REACH Regulation

Crystal Violet Solution, conc., alcoholic (1%)

Revision date: 29.12.2021

Product code: 2C-171

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

Crystal Violet Solution, conc., alcoholic (1%)

UFI: MC52-U2YD-S004-56V6

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

Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Company name:	Waldeck GmbH & Co KG	
	Division Chroma	
Street:	Havixbecker Str. 62	
Place:	D-48161 Münster	
Post-office box:	410180	
	D-48065 Münster	
Telephone:	+49(0)2534/9700	Telefax: +49(0)2534/970258
e-mail:	labor1@waldeck-ms.de	
Contact person:	Dr. Wolfgang Schröder	Telephone: +49(0)2534/970-212
e-mail:	labor1@waldeck-ms.de	
Responsible Department:	Labor	
	Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr	
	labor1@waldeck-ms.de	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Flam. Liq. 2; H225
 Eye Irrit. 2; H319
 Carc. 2; H351
 Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

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

Signal word: Danger

Pictograms:

**Hazard statements**

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
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P241	smoking.
P280	Use explosion-proof electrical/ventilating/lighting equipment.
P303+P361+P353	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P305+P351+P338	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378	If eye irritation persists: Get medical advice/attention.
P403+P235	In case of fire: Use In case of fire: Use sand, extinguishing powder or alcohol-resistant foam to extinguish. to extinguish.
	Store in a well-ventilated place. Keep cool.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64-17-5	ethanol; ethyl alcohol			95 - < 100 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			
548-62-9	C.I. Basic Violet 3; 4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride			1 - < 5 %
	208-953-6	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 H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
64-17-5	200-578-6	ethanol; ethyl alcohol	95 - < 100 %
		inhalation: LC50 = 95,6 mg/l (vapours); oral: LD50 = 6200 mg/kg	
548-62-9	208-953-6	C.I. Basic Violet 3; 4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride	1 - < 5 %
		oral: LD50 = 420 mg/kg	

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. Medical treatment necessary.

After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.



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After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. 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**

Water spray jet, Carbon dioxide (CO₂), Foam, Extinguishing powder.

5.2. Special hazards arising from the substance or mixture

Highly flammable. 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****General advice**

Remove all sources of ignition. 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**Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). 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. Do not breathe gas/fumes/vapour/spray.

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.



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Advice on general occupational hygiene

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.

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

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

storage temperature: at room temperature

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment**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

Flame-retardant protective clothing. Wear anti-static footwear and 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:

Liquid



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Colour: violet
 Odour: characteristic

Changes in the physical state

Melting point/freezing point: not determined
 Boiling point or initial boiling point and boiling range: 78 °C
 Flash point: 17 °C

Flammability

Solid/liquid: not applicable
 Gas: not applicable
 Lower explosion limits: 3,5 vol. %
 Upper explosion limits: 15 vol. %
 Auto-ignition temperature: 400 °C

Self-ignition temperature

Solid: not applicable
 Gas: not applicable
 Decomposition temperature: not determined
 pH-Value: not determined
 Water solubility: miscible
 (at 20 °C)

Solubility in other solvents

not determined
 Partition coefficient n-octanol/water: not determined
 Vapour pressure: 58 hPa
 (at 20 °C)
 Vapour pressure: 293 hPa
 (at 50 °C)
 Density: 0,79 g/cm³
 Relative vapour density: not determined

9.2. Other information**Information with regard to physical hazard classes**

Oxidizing properties
 Not oxidising.

Other safety characteristics

Solvent content: 99,00 %
 Solid content: not determined
 Evaporation rate: not determined

Further Information**SECTION 10: Stability and reactivity****10.1. Reactivity**

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.



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10.4. Conditions to avoid

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

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 hazard classes as defined in GB CLP Regulation****Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol; ethyl alcohol				
	oral	LD50 6200 mg/kg	Rat	IUCLID	
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	
548-62-9	C.I. Basic Violet 3; 4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride				
	oral	LD50 420 mg/kg	Rat	GESTIS	

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information**12.1. Toxicity**

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

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
64-17-5	ethanol; ethyl alcohol				
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol; ethyl alcohol	-0,31

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.



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12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. 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****Disposal recommendations**

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

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number or ID number:**

UN 1170

14.2. UN proper shipping name:

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3



Classification code:

F1

Special Provisions:

144 601

Limited quantity:

1 L

Excepted quantity:

E2

Transport category:

2

Hazard No:

33

Tunnel restriction code:

D/E

Inland waterways transport (ADN)**14.1. UN number or ID number:**

UN 1170

14.2. UN proper shipping name:

ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3



Classification code:

F1

Special Provisions:

144 601

Limited quantity:

1 L

Excepted quantity:

E2

Marine transport (IMDG)**14.1. UN number or ID number:**

UN 1170



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14.2. UN proper shipping name: ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)**14.3. Transport hazard class(es):** 3**14.4. Packing group:** II

Hazard label: 3



Special Provisions: 144

Limited quantity: 1 L

Excepted quantity: E2

EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number or ID number:** UN 1170**14.2. UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)**14.3. Transport hazard class(es):** 3**14.4. Packing group:** II

Hazard label: 3



Special Provisions: A3 A58 A180

Limited quantity Passenger: 1 L

Passenger LQ: Y341

Excepted quantity: E2

IATA-packing instructions - Passenger: 353

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 364

IATA-max. quantity - Cargo: 60 L

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

C.I. Basic Violet 3; 4-[4,4'-bis(dimethylamino)

benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40, Entry 75

2010/75/EU (VOC): 99 % (782,1 g/l)

2004/42/EC (VOC): 99 % (782,1 g/l)

Information according to 2012/18/EU P5c FLAMMABLE LIQUIDS

(SEVESO III):

Additional information

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).



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National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D):

2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2.

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%

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Eye Irrit. 2; H319	Calculation method
Carc. 2; H351	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Further Information

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)