

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

### 1.1. Product identifier

**Product name:** CRYSTAL VIOLET 2% SOLUTION

**Product code:** A67404

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

**Use of substance / mixture:** Laboratory Chemicals, Manufacture of Substances.

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

**Company name:** PHILIP HARRIS  
2 Gregory Street  
Hyde  
Cheshire  
SK14 4HR  
United Kingdom

**Tel:** +44 (0)845 1200 506

**Fax:** +44 (0)161 367 2140

**Email:** [enquiries@philipharris.co.uk](mailto:enquiries@philipharris.co.uk)

### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 845 1200 506

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CHIP:** Xn: R20/21/22; Xn: R40; -: R52/53; Xn: R68/20/21/22

**Classification under CLP:** Carc. 2: H351; Flam. Liq. 3: H226; Aquatic Chronic 2: H411; Eye Irrit. 2: H319; STOT SE 2: H371;

**Most important adverse effects:** Harmful by inhalation, in contact with skin and if swallowed. Limited evidence of a carcinogenic effect. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H319: Causes serious eye irritation.  
H351: Suspected of causing cancer.  
H371: May cause damage to organs .  
H226: Flammable liquid and vapour.  
H411: Toxic to aquatic life with long lasting effects.

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**Signal words:** Warning

**Hazard pictograms:** GHS07: Exclamation mark

GHS08: Health hazard

GHS02: Flame

GHS09: Environmental



**Precautionary statements:** P201: Obtain special instructions before use.

P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+313: IF exposed or concerned: Get medical attention.

P309+311: IF exposed or if you feel unwell: Call a POISON CENTRE or doctor.

P273: Avoid release to the environment.

P281: Use personal protective equipment as required.

**Label elements under CHIP:**

**Hazard symbols:** Harmful.



**Risk phrases:** R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R40: Limited evidence of a carcinogenic effect.

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R68/20/21/22: Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

**Safety phrases:** S36/37: Wear suitable protective clothing and gloves.

### 2.3. Other hazards

**Other hazards:** Danger of serious damage to health by prolonged exposure.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

[cont...]

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**Hazardous ingredients:**

ETHANOL

EINECS	CAS	CHIP Classification	CLP Classification	Percent
200-578-6	64-17-5	F: R11 Substance with a Community workplace exposure limit.	Flam. Liq. 2: H225	>90%

METHANOL

200-659-6	67-56-1	F: R11; T: R23/24/25; T: R39/23/24/25	Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370	1-10%
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C.I. BASIC VIOLET 3

208-953-6	548-62-9	Xn: R22; Xn: R40; Xi: R41; N: R50/53	Carc. 2: H351; Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	<2%
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**Section 4: First aid measures**

**4.1. Description of first aid measures**

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Wash out mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor.

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

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed / immediate effects:** Delayed effects can be expected after long-term exposure.

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

**Immediate / special treatment:** Show this safety data sheet to the doctor in attendance. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section

11

**Section 5: Fire-fighting measures**

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**5.1. Extinguishing media**

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers. CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

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

**Exposure hazards:** In combustion emits toxic fumes. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides. In combustion emits toxic fumes of hydrogen chloride / phosgene.

**5.3. Advice for fire-fighters**

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

**Section 6: Accidental release measures**

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Evacuate the area immediately. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**6.2. Environmental precautions**

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding. Alert the neighbourhood to the presence of fumes or gas. Prevent further leakage or spillage if safe to do so.

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

**Clean-up procedures:** Absorb into dry earth or sand. Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Contain spillage, and then collect with an electronically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4. Reference to other sections**

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

**Section 7: Handling and storage**

**7.1. Precautions for safe handling**

**Handling requirements:** Avoid contact with skin and eyes. Ensure there is sufficient ventilation of the area. Keep away from sources of ignition - no smoking. Take measures to prevent build up of electrostatic charge. For precautions see section 2.2

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

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed. Containers which are open must be carefully resealed and kept upright to prevent leakage.

[cont...]

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

**Specific end use(s):** Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

**Section 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Hazardous ingredients:**

**ETHANOL**

**Workplace exposure limits:**

**Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1920 mg/m <sup>3</sup>	-	-	-

**METHANOL**

UK	266 mg/m <sup>3</sup>	333 mg/m <sup>3</sup>	-	-
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**DNEL/PNEC Values**

**DNEL / PNEC** No data available.

**8.2. Exposure controls**

**Engineering measures:** Ensure there is sufficient ventilation of the area. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency. Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi purpose combination (US) or type AXBEK (EN14387 respirator cartridges as a back up to engineering controls. If the respirator is the sole means of protection use a full face supplied air respirator. Use respirators and components tested & approved under appropriate government standards eg CEN (EU) or NIOSH (US).

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Wash and dry hands. Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Eye protection:** Face shield and safety glasses. Use equipment for eye protection test and approved

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under appropriate government statements such as NIOSH (US) or EN 166(EU) Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Environmental:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Evaporation rate:** No data available.

**Oxidising:** No data available.

**Solubility in water:** No data available.

**Viscosity:** No data available.

**Boiling point/range°C:** No data available.

**Flammability limits %: lower:** No data available.

**Flash point°C:** No data available.

**Autoflammability°C:** No data available.

**Relative density:** No data available.

**VOC g/l:** No data available.

**Melting point/range°C:** No data available.

**upper:** No data available.

**Part.coeff. n-octanol/water:** No data available.

**Vapour pressure:** No data available.

**pH:** No data available.

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat. Hot surfaces. Flames.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids. Alkali metals. Acid chlorides. Acid anhydrides. Reducing agents. Ammonia, Peroxides

[cont...]

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**10.6. Hazardous decomposition products**

**Haz. decomp. products:** In combustion emits toxic fumes. In the event of fire see section 5.

**Section 11: Toxicological information**

**11.1. Information on toxicological effects**

**Hazardous ingredients:**

**ETHANOL**

IVN	RAT	LD50	1440	mg/kg
ORL	MUS	LD50	3450	mg/kg
ORL	RAT	LD50	7060	mg/kg

**METHANOL**

IVN	RAT	LD50	2131	mg/kg
ORL	MUS	LD50	7300	mg/kg
ORL	RAT	LD50	5628	mg/kg

**Relevant effects for mixture:**

Effect	Route	Basis
Acute toxicity (harmful)	INH DRM ING	Hazardous: calculated

**Symptoms / routes of exposure**

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** There may be irritation of the throat.

**Inhalation:** No symptoms.

**Delayed / immediate effects:** Delayed effects can be expected after long-term exposure.

**Section 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity values:** No data available.

**12.2. Persistence and degradability**

**Persistence and degradability:** Biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No bioaccumulation potential.

**12.4. Mobility in soil**

**Mobility:** Readily absorbed into soil.

[cont...]

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

**PBT identification:** This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects**

**Other adverse effects:** Very toxic to aquatic organisms.

**Section 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Disposal of packaging:** Dispose of as unused product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**Section 14: Transport information**

**14.1. UN number**

**UN number:** UN1993

**14.2. UN proper shipping name**

**Shipping name:** FLAMMABLE LIQUID, N.O.S.

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

**Transport class:** 3

**14.4. Packing group**

**Packing group:** I

**14.5. Environmental hazards**

**Environmentally hazardous:** No

**Marine pollutant:** No

**14.6. Special precautions for user**

**Special precautions:** No special precautions.

**Tunnel code:** D/E

**Transport category:** 1

**Section 15: Regulatory information**

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

**Specific regulations:** Not applicable.

**15.2. Chemical Safety Assessment**

[cont...]



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**Section 16: Other information**

**Other information**

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H225: Highly flammable liquid and vapour.  
H226: Flammable liquid and vapour.  
H301: Toxic if swallowed.  
H302: Harmful if swallowed.  
H311: Toxic in contact with skin.  
H318: Causes serious eye damage.  
H319: Causes serious eye irritation.  
H331: Toxic if inhaled.  
H351: Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.  
H370: Causes damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.  
H371: May cause damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.  
H410: Very toxic to aquatic life with long lasting effects.  
H411: Toxic to aquatic life with long lasting effects.  
R11: Highly flammable.  
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.  
R22: Harmful if swallowed.  
R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.  
R39/23/24/25: Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.  
R40: Limited evidence of a carcinogenic effect.  
R41: Risk of serious damage to eyes.  
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R68/20/21/22: Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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