

1 Identification

- **Product identifier**
- **Trade name:** Huckers Crystal Violet Gram Stain
- **Other means of identification**
- **Product number:** 9.3080
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
NEUTRON PHARMACHEMICAL CO
- 11, 3th Floor, Borjsaz Building, Azadi Ave, Tehran, Iran. T 021-66906732-3 -F 021-66581408
- info@neutronco.com www.neutronco.com
- **Information department:** Product safety department
- **Emergency telephone number:**
125

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.

Specific target organ toxicity (single exposure) 2

H371 May cause damage to organs.

Specific target organ toxicity (repeated exposure) 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Skin corrosion 1A

H314 Causes severe skin burns and eye damage.



GHS07

Eye irritation 2A

H319 Causes serious eye irritation.

- **Label elements**

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
Ethyl alcohol

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: Huckers Crystal Violet Gram Stain

(Contd. of page 1)

4-methylpentan-2-one

· Hazard statements

Causes severe skin burns and eye damage.

Causes serious eye irritation.

Suspected of causing cancer.

May cause damage to organs.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Information pertaining to particular dangers for man and environment:
· Classification system:
· NFPA ratings (scale 0 - 4)


Health = 3

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)


Health = *3

Fire = 0

Reactivity = 0

· Other hazards
· Results of PBT and vPvB assessment
· PBT: Not applicable.

· vPvB: Not applicable.

· Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

· Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: CRYSTAL VIOLET HUCKER'S

(Contd. of page 2)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

64-17-5	Ethyl alcohol	1-5%
108-10-1	4-methylpentan-2-one	0.1-1%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

64-17-5	Ethyl alcohol	1,800 ppm
6009-70-7	Ammonium Oxalate	30 mg/m ³

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: **CRYSTAL VIOLET HUCKER'S**

(Contd. of page 3)

108-10-1	4-methylpentan-2-one	75 ppm
67-56-1	Methyl Alcohol	530 ppm
548-62-9	Crystal Violet	0.082 mg/m ³

· **PAC-2:**

64-17-5	Ethyl alcohol	3300* ppm
6009-70-7	Ammonium Oxalate	330 mg/m ³
108-10-1	4-methylpentan-2-one	500 ppm
67-56-1	Methyl Alcohol	2,100 ppm
548-62-9	Crystal Violet	0.9 mg/m ³

· **PAC-3:**

64-17-5	Ethyl alcohol	15000* ppm
6009-70-7	Ammonium Oxalate	2,000 mg/m ³
108-10-1	4-methylpentan-2-one	3000* ppm
67-56-1	Methyl Alcohol	7200* ppm
548-62-9	Crystal Violet	83 mg/m ³

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· **Information about protection against explosions and fires:** No special measures required.· **Conditions for safe storage, including any incompatibilities**· **Storage:**· **Requirements to be met by storerooms and receptacles:** No special requirements.· **Information about storage in one common storage facility:** Not required.· **Further information about storage conditions:** Keep receptacle tightly sealed.· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Control parameters**· **Components with limit values that require monitoring at the workplace:****64-17-5 Ethyl alcohol**PEL Long-term value: 1900 mg/m³, 1000 ppmREL Long-term value: 1900 mg/m³, 1000 ppm

TLV Short-term value: 1000 ppm

A3

108-10-1 4-methylpentan-2-onePEL Long-term value: 410 mg/m³, 100 ppm

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: **CRYSTAL VIOLET HUCKER'S**

(Contd. of page 4)

REL	Short-term value: 300 mg/m ³ , 75 ppm Long-term value: 205 mg/m ³ , 50 ppm
TLV	Short-term value: 75 ppm Long-term value: 20 ppm BEI, A3

· **Ingredients with biological limit values:**

108-10-1 4-methylpentan-2-one

BEI	1 mg/L Medium: urine Time: end of shift Parameter: MIBK
-----	--

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

US

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: CRYSTAL VIOLET HUCKER'S

(Contd. of page 5)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Physical state	Liquid
· Color:	Dark
· Odor:	Characteristic
· Odor threshold:	Not determined.
· Melting point/Melting range:	0 °C (32 °F)
· Boiling point/Boiling range:	100 °C (212 °F)
· Flammability:	Not flammable.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	Not determined.
· pH-value at 20 °C (68 °F):	0-1.8
· Viscosity:	
· Kinematic:	Not determined.
· Dynamic at 20 °C (68 °F):	0.952 mPas
· Solubility in / Miscibility with	
· Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Vapor pressure:	
· Density at 20 °C (68 °F):	0.99941 g/cm ³ (8.34008 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Particle characteristics	Not applicable.

· Other information

· Appearance:

· Form: Liquid

· Important information on protection of health and environment, and on safety.

· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Solvent content:	
· Organic solvents:	2.2 %
· Water:	96.9 %
· VOC content:	2.23 %
	715.6 g/l / 5.97 lb/gal
· Solids content:	0.8 %
· Change in condition	
· Evaporation rate	Not determined.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: CRYSTAL VIOLET HUCKER'S

(Contd. of page 6)

- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
 - **Primary irritant effect:**
 - **on the skin:** Strong caustic effect on skin and mucous membranes.
 - **on the eye:** Strong caustic effect.
 - **Sensitization:** No sensitizing effects known.
 - **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Corrosive
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
 - **Interactive effects** No interactive effects between components are known.
 - **Carcinogenic categories**
 - **IARC (International Agency for Research on Cancer)**
- | | | |
|----------|----------------------|----|
| 64-17-5 | Ethyl alcohol | 1 |
| 108-10-1 | 4-methylpentan-2-one | 2B |
| 548-62-9 | Crystal Violet | 2B |
- **NTP (National Toxicology Program)**
 - None of the ingredients is listed.
 - **OSHA-Ca (Occupational Safety Health Administration)**
 - None of the ingredients is listed.
 - **Alternative sources for toxicological information**
No non-standard sources for toxicological information where used.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

US

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: CRYSTAL VIOLET HUCKER'S

(Contd. of page 7)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, ADR, IMDG, IATA	Void
· UN proper shipping name	
· DOT, ADR, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· DOT, ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
· Special precautions for user	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· Section 355 (extremely hazardous substances):		
None of the ingredients is listed.		
· Section 313 (Specific toxic chemical listings):		
108-10-1	4-methylpentan-2-one	
67-56-1	Methyl Alcohol	
· TSCA (Toxic Substances Control Act):		
7732-18-5	Deionized Water, Reagent Grade A.C.S.	ACTIVE
64-17-5	Ethyl alcohol	ACTIVE
108-10-1	4-methylpentan-2-one	ACTIVE
67-56-1	Methyl Alcohol	ACTIVE
548-62-9	Crystal Violet	ACTIVE

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: **CRYSTAL VIOLET HUCKER'S**

(Contd. of page 8)

· **Hazardous Air Pollutants**

108-10-1 4-methylpentan-2-one

67-56-1 Methyl Alcohol

· **Proposition 65**· **Chemicals known to cause cancer:**

108-10-1 4-methylpentan-2-one

548-62-9 Crystal Violet

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

64-17-5 Ethyl alcohol

108-10-1 4-methylpentan-2-one

67-56-1 Methyl Alcohol

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

108-10-1 4-methylpentan-2-one

I

· **TLV (Threshold Limit Value)**

64-17-5 Ethyl alcohol

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).· **Hazard pictograms**

GHS05 GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

Ethyl alcohol

4-methylpentan-2-one

· **Hazard statements**

Causes severe skin burns and eye damage.

Causes serious eye irritation.

Suspected of causing cancer.

May cause damage to organs.

May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/21/2025

Reviewed on 01/17/2023

Trade name: CRYSTAL VIOLET HUCKER'S

(Contd. of page 9)

*If swallowed: Rinse mouth. Do NOT induce vomiting.**If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**If inhaled: Remove person to fresh air and keep comfortable for breathing.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Immediately call a poison center/doctor.**IF exposed or concerned: Get medical advice/attention.**Specific treatment (see on this label).**Get medical advice/attention if you feel unwell.**If eye irritation persists: Get medical advice/attention.**Wash contaminated clothing before reuse.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.**· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.*

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.**· **Date of preparation** 04/21/2025**· **Abbreviations and acronyms:****ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**DOT: US Department of Transportation**IATA: International Air Transport Association**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**NFPA: National Fire Protection Association (USA)**HMIS: Hazardous Materials Identification System (USA)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety **Health****TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**BEI: Biological Exposure Limit**Skin corrosion 1A: Skin corrosion/irritation – Category 1A**Eye irritation 2A: Serious eye damage/eye irritation – Category 2A**Carcinogenicity 2: Carcinogenicity – Category 2**Specific target organ toxicity (single exposure) 2: Specific target organ toxicity (single exposure) – Category 2**Specific target organ toxicity (repeated exposure) 2: Specific target organ toxicity (repeated exposure) – Category 2*