

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name Gentian Violet, Ethanol solution

CAS number See section 3

Synonyms None

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

Identified uses Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
 12501 Pauls Valley Road
 Austin, Texas 78737
 U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable Liquids (Category 2)
 Acute toxicity, Oral (Category 4)
 Serious eye damage (Category 1)
 Carcinogenicity (Category 2)
 Short-term (acute) aquatic hazard (Category 1)
 Long-term (chronic) aquatic hazard (Category 1)

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	<p> Highly flammable liquid and vapor. Harmful if swallowed. Causes serious eye damage. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects. </p>
Precautionary statements	<p>Prevention:</p> <p> Keep away from heat, open flames, sparks. No smoking. Keep container tightly closed. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use explosion proof electrical, lighting, ventilating equipment. Use only non-sparking tools. Wash hands, forearms, and exposed areas thoroughly after handling. Wear eye protection, protective gloves, protective clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Avoid release to the environment. Keep cool. </p>

Response:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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 SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

IF exposed or concerned: Get medical advice/ attention.

Fire:

In case of fire, use CO₂, dry chemical, or foam for extinction.

Storage:

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal:

Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ethanol	Ethyl alcohol; EtOH	64-17-5	99%
Gentian Violet	Basic Violet 3, Methyl Violet 10B, Hexamethylpararosaniline chloride, Crystal Violet	548-62-9	1%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Show this sheet to a doctor if medical advice is needed.
If inhaled	Move to fresh air. Call a physician if symptoms develop or persist.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation is experienced, flush with water. Get medical attention if irritation develops and persists.
In case of eye contact	Immediately flush eyes with water for at least 15 minutes while holding. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms persist.

If swallowed After swallowing: immediately make victim drink water (two glasses at most).
Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea, and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray, alcohol-resistant foam, BC-powder, Carbon dioxide (CO₂).

Unsuitable extinguishing media Water jet.

5.2 Specific hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Hydrogen chloride gas.

5.3 Special protective equipment and precautions for firefighters

In case of fire and/or explosion, do not breathe fumes. Wear self-contained breathing apparatus. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

5.4 Further information

Flash Point 13 - 17 °C / 55.4 - 62.6 °F (Pure ethanol)

Autoignition Temperature 363 °C / 685.4 °F (Pure ethanol)

Explosion limits

Upper 19 vol % (Pure ethanol)

Lower 3.3 vol % (Pure ethanol)

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge

No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Remove persons to safety. Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

In case of a spill, cover drains. Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder. Use of absorbent materials. Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. See section 13 for proper disposal.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities**Storage conditions**

Keep container tightly closed in a dry, dark, and well-ventilated place. Keep away from heat and sources of ignition. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct light. Store in tightly closed container. Keep in an area equipped with sprinklers. Store away from incompatible materials.

Incompatibilities

Strong oxidizing agents, Strong acids, Oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Ethanol	PEL-TWA	1000 ppm 1900 mg/m ³

US. ACGIH Threshold Limit Values

Component	Type	Value
Ethanol	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Ethanol	IDLH	3300 ppm
	TWA	1000 ppm 1900 mg/m ³

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Control of environmental exposure

Do not let product enter drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	No information available
Odor	No information available
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No information available
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	19 vol % (Pure ethanol)
Lower	3.3 vol % (Pure ethanol)
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	363 °C / 685.4 °F (Pure ethanol)
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Mixture
Molecular Weight	Mixture
VOC Content(%)	99%
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Vapors may form explosive mixture with air.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Risk of explosion with oxidizing agents and strong acids.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Incompatible products.

10.5 Incompatible materials

Oxidizing agents and strong acids.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethanol	10470 mg/kg (Rat)	-	117-125 mg/L/4h (Rat)
Crystal Violet	420 mg/kg (Rat)	-	-

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Causes serious eye damage and irritation.

Respiratory or skin sensitization

Not classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Not classified as a germ cell mutagenic.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Ethanol	64-17-5	Not listed	Not listed	Not listed	Not listed	Not listed
Crystal Violet	548-62-9	2B	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

Prolonged inhalation may be harmful.

11.2 Additional Information

No additional information.

SECTION 12: Ecological information

12.1 Toxicity

Component		Species	Test Results
Ethanol	EC10	Freshwater Algae	11.5 mg/L, 72 hours
	EC50	Freshwater Algae	275 mg/L, 72 hours
	LC50	Freshwater Fish	11200 mg/L, 24 hours
	NOEC	Freshwater Fish	250 mg/L
Ethanol	EC50	Freshwater Invertebrate	5012 mg/L, 48 hours
		Marine Invertebrate	857 mg/L, 48 hours
	NOEC	Freshwater Invertebrate	9.6 mg/L, 10 days
		Marine Invertebrate	79 mg/L, 96 hours
Crystal violet	LC50	Pimephales promelas (fathead minnow)	0.13 mg/l, 96 h
	EC50	Daphnia magna (Water flea)	0.24 - 0.5 mg/l, 48 h
	static test ErC50	Pseudokirchneriella subcapitata (green algae)	0.2 - 0.8 mg/l, 72 h
	EC50	Bacteria	10 - 100 mg/l

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number	UN1170
Proper Shipping name	ETHANOL SOLUTION
Hazard Class	3
Packaging Group	II

IMDG

UN Number	UN1170
Proper Shipping name	ETHANOL SOLUTION
Hazard Class	3
Packaging Group	II

IATA

UN Number	UN1170
Proper Shipping name	ETHANOL SOLUTION
Hazard Class	3
Packaging Group	II

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not listed/applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed/applicable.

SARA 304 Emergency release notification

Not listed/applicable.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed/applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed/applicable.

SARA 311/312 Hazardous

See section 2 for hazard classifications.

SARA 313 (TRI reporting)

Not listed/applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not listed/applicable.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not listed/applicable.

Safe Drinking Water Act

Not listed/applicable.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Listed, Ethanol (CAS #64-17-5).

US state regulations

US. Massachusetts RTK - Substance List

Listed, Ethanol (CAS #64-17-5).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Ethanol (CAS #64-17-5).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Ethanol (CAS #64-17-5).

California Proposition 65

Listed, Ethanol (CAS #64-17-5).

Listed, Crystal Violet (CAS #548-62-9).

SECTION 16: Other information

Date of Issue: 7/10/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.