SAFETY DATA SHEET

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

1.1 Product identifiers

Product name:	Gram Crystal Violet
CAS number:	548-62-9
Synonyms:	No information available.

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
22111 Highway 71 West, Suite 601
Spicewood, Texas 78669
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 3)
Carcinogenicity (Category 1A)
Specific target organ toxicity (single exposure) (Category 3) - Target Organs: Respiratory system, Central nervous system (CNS), Optic nerve.
Specific target organ toxicity (repeated exposure) (Category 1) - Target Organs: Liver, Blood.

2.2 GHS Label elements, including precautionary statements

Pictogram:

Signal Word: **Danger**

Hazard statement(s): Flammable liquid and vapor. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. Causes damage to organs through prolonged or repeated exposure.

Precautionary statement(s): **Prevention** - Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. use only non-spark tools. Take precautionary measures against static discharge. Keep cool. **Response** - IF exposed or concerned: Get medical attention/advice. 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. In case of fire: Use CO2, dry chemical, or foam for extinction.

Hazards not otherwise classified

Harmful to aquatic life with long lasting effects. WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

SECTION 3: Composition/information on ingredients

3.1 Components

Component	CAS-No	Weight %
C.I. Basic violet 1	548-62-9	< 1.0
Ethyl alcohol	64-17-5	8.0
Methyl alcohol	67-56-1	< 1.0
Ammonium oxalate, monohydrate	6009-70-7	< 1.0

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice: If symptoms persist, call a physician.

If inhaled: Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

In case of skin contact:	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
In case of eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
In case of ingestion:	Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

None reasonable foreseeable. Breathing difficulties. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable (and unsuitable) extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

5.2 Specific hazards arising from the substance or mixture

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/ NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharge.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

SECTION 8. Exposure controls/personal protection

8.1 Occupational exposure limits

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m³ TWA: 1000 ppm TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m³ (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m³ Skin TWA: 200 ppm TWA: 260 mg/m³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Ethyl alcohol	TWA: 1000 ppm TWA: 1880 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³	STEL: 1000 ppm
Methyl alcohol	TWA: 200 ppm TWA: 262 mg/m³ STEL: 250 ppm STEL: 328 mg/m³ Skin	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 310 mg/m³	TWA: 200 ppm STEL: 250 ppm Skin

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ ventilating/lighting/equipment.

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 and body protection

Long-sleeved clothing

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 190.134 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

Should not be released into the environment. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid.
Appearance	Purple.
Odor	No information available.
Odor Thresh	No information available.
pH	No information available.
Melting Point/Range	No information available.
Boiling Point/Range	No information available.
Flash Point	54.4 °C / 129.9 °F
Evaporation Rate	No information available.
Flammability (solid, gas)	Not applicable.
Flammability or explosive limit	
Upper	: NA
Lower	: NA

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	No information available.
Decomposition Temp	No information available.
Viscosity	No information available.
Molecular Formula	No information available.
Molecular Weight	No information available.
VOC Content(%)	8.9999
Oxidizing properties	No information available.

9.2 Other safety information

None.

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing. Hazardous polymerization does not occur.

10.4 Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

None under normal use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product Information

Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
C.I. Basic violet 1	LD50 = 420 mg/kg (Rat)	Not listed	Not listed
Ethyl alcohol	LD50 = 7060 mg/kg (Rat)	Not listed	20000 ppm/10H (Rat)
Methyl alcohol	**Calc. ATE 60 mg/kg (Human evidence)** LD50 = 6200 mg/kg (Rat)	**Calc. ATE 300 mg/kg (Human evidence)** LD50 = 15800 mg/kg (Rabbit)	**Calc. ATE 3.0 mg/l (vapours) or 0.5 mg/l (dust/mists) (Human evidence)** LC50 = 64000 ppm (Rat) 4 h 83.2 mg/L (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen. This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
C.I. Basic violet 1	548-62-9	Not listed	Not listed	Not listed	Not listed	Not listed
Ethyl alcohol	64-17-5	Group 1	Known	A3	X	Not listed
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed
Ammonium oxalate, monohydrate	6009-70-7	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity

No information available.

Specific target organ toxicity - single exposure

Respiratory system Central nervous system (CNS) Optic nerve.

Specific target organ toxicity - repeated exposure

Liver, Blood

Aspiration hazard

No information available.

Chronic effects

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

11.2 Additional information

None.

SECTION 12. Ecological information

12.1 Toxicity

Contains a substance which is: Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethyl alcohol	EC50 (72h) = 275 mg/l (Chlorella vulgaris)	Fathead minnow (Pimephales promelas) LC50 = 14200 mg/l/96h	Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min	EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Component	log Pow
C.I. Basic violet 1	0.51
Ethyl alcohol	-0.32
Methyl alcohol	-0.74
Ammonium oxalate, monohydrate	-2.3

12.5 Results of PBT and vBvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

The toxicological properties have not been fully investigated.

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.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Methyl alcohol - 67-56-1	U154	-

SECTION 14: Transport information

DOT

UN-No	UN1170
Proper Shipping Name	Ethanol Solution
Hazard Class	3
Packing Group	III

TDG

UN-No	UN1170
Proper Shipping Name	Ethanol Solution
Hazard Class	3
Packing Group	III

IMDG/IMO

UN-No	UN1170
Proper Shipping Name	Ethanol Solution
Hazard Class Packing Group	3 III

ICAO/IATA

UN-No	UN1170
Proper Shipping Name	Ethanol Solution
Hazard Class Packing Group	3 III

SECTION 15: Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
C.I. Basic violet 1	X	X	-	208-953-6	-		X	X	X	X	X
Ethyl alcohol	X	X	-	200-578-6	-		X	X	X	X	X
Methyl alcohol	X	X	-	200-659-6	-		X	X	X	X	X
Ammonium oxalate, monohydrate	-	-	-	-	-		X	X	X	X	-

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Methyl alcohol	67-56-1	< 1.0	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Ammonium oxalate, monohydrate	X	-	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Methyl alcohol	X		-

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Methyl alcohol	5000 lb	-
Ammonium oxalate, monohydrate	5000 lb	-

California Proposition 65 This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Ethyl alcohol	64-17-5	Development (alcoholic beverages only)	-	Developmental Carcinogen
Methyl alcohol	67-56-1	Developmental	-	Developmental

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl alcohol	X	X	X	X	X
Methyl alcohol	X	X	X	X	X
Ammonium oxalate, monohydrate	X	-	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Moderate risk, Grade 2

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class B3 Combustible liquid
D2A Very toxic materials

SECTION 16: Other information

Issue Date 4/15/2015
Revision Date 07/18/2023

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.