

## Gram's Crystal Violet Solution Safety Data Sheet (SDS)

## SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## Gram's Crystal Violet Solution

 Signal Word  
**WARNING**

 Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261  
 Chemtrec Emergency Phone Number: (800) 424-9669

Pictograms

## SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 3). Flammable liquid and vapor (H226). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).



Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316)

Hazard class: Carcinogenicity (Category 2). Suspected of causing cancer (H351). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).



## SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Crystal violet	548-62-9	C <sub>25</sub> H <sub>30</sub> ClN <sub>3</sub>	408.00	1.4%
Ethyl alcohol, denatured	64-17-5	C <sub>2</sub> H <sub>5</sub> OH	46.07	16.1%
Ammonium oxalate	6009-70-7	(NH <sub>4</sub> ) <sub>2</sub> C <sub>2</sub> O <sub>4</sub> •H <sub>2</sub> O	142.11	0.8%
Water	7732-18-5	H <sub>2</sub> O	18.00	>81.6%
Synonyms: Hucker formula				

## SECTION 4 — FIRST AID MEASURES

**If exposed or concerned:** Get medical advice or attention (P308+P313).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313). **If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

**If swallowed:** Rinse mouth. **Call a POISON CENTER or physician if you feel unwell.**

## SECTION 5 — FIRE FIGHTING MEASURES

Class IC flammable liquid due to ethyl alcohol content.

When heated, releases flammable fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher (P370+P378).

NFPA Code

H-1

F-3

R-0

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

## SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators and stains.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can. Keep container tightly closed (P233). Keep cool (P235). Ground or bond container and receiving equipment (P240). Use explosion-proof electrical and ventilating equipment (P241). Use only non-sparking tools (P242).

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Will stain skin, clothing, and surfaces.

Exposure guidelines: (as ethyl alcohol) PEL 1000 ppm (OSHA), Ceiling 1000 ppm (ACGIH)

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Purple-violet liquid. Alcohol odor.

Boiling point: 78 °C (ethyl alcohol)

Biological stain.

Gram stain recipe.

## SECTION 10 — STABILITY AND REACTIVITY

Avoid any source of fire or ignition.

Shelf life: Good, if stored properly.

## SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Eye irritation, nausea, dizziness, headache.

 ORL-RAT LD<sub>50</sub>: 7060 mg/kg (as ethyl alcohol)

Chronic effects: Liver damage, reproductive, teratogenic effects, carcinogen.

 IHL-RAT LC<sub>50</sub>: 20,000 ppm/10H (as ethyl alcohol)

 SKN-RBT LD<sub>50</sub>: N.A.

Target organs: Eyes, skin, central nervous system, liver, reproductive system.

## SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

## SECTION 13 — DISPOSAL CONSIDERATIONS

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26b is one option.

## SECTION 14 — TRANSPORT INFORMATION

Shipping name: Ethyl alcohol. Hazard class: 3, Flammable liquid. UN number: UN1170.

## SECTION 15 — REGULATORY INFORMATION

Not listed.

## SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

**Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.**

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