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MATERIAL SAFETY DATA SHEET

EMERGENCY ASSISTANCE - 24 hour

For emergency assistance involving chemicals call CHEMTREC (800) 424-9300.

SECTION 1: MATERIAL INFORMATION

Common Name: **CRYSTAL VIOLET STAIN SOLUTION**
Synonyms: Gram Crystal Violet; Gram Gentian Violet
Catalog Number: R5812, R5813, R5814, R5815, R5816, R5817, R5818, R5820
CAS #: N/AV
WARNING: POISON, FLAMMABLE

SECTION 2: HAZARDOUS INGREDIENTS

<u>Hazardous Components</u>	<u>CAS #</u>	<u>Chemical Family</u>	<u>Molecular Formula</u>	<u>Approximate Concentration</u>
Ammonium Oxalate	6009-70-7	Salt of organic acid	C ₂ H ₈ N ₂ O ₄	0.8%
Crystal Violet	548-62-9	Basic Dye(s)	C ₂₅ H ₃₀ ClN ₃	2%
Ethanol	64-17-5	Alcohol	C ₂ H ₅ OH	20%

SECTION 3: PHYSICAL DATA

Appearance: Purple liquid with metallic green sheen	pH: N/AV	Vapor Density: N/AV
Boiling Point: N/AV	Solubility in Water: Very	Flash Point: 44°C (112°F) cc
Melting Point: N/AV	Vapor Pressure: N/AV	Evaporation Rate: N/AV
Odor: Ethanol	Specific Gravity: N/AV	

SECTION 4: FIRE AND EXPLOSION HAZARD

Flammable: Yes

Flammability Limits:

Upper: N/AV Lower: N/AV

Extinguish Media:

Water spray, CO₂, dry chemical, "alcohol" or polymer foam. Water spray to cool exposed containers and disperse vapors.

Special Hazards:

Wear self-contained, positive-pressure breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards:

Emits toxic fumes under fire conditions.

SECTION 5: REACTIVITY DATA

Stable: Unstable:

Conditions to Avoid:

Heat, sparks, open flame

Materials to Avoid:

- Water -
- Acids -
- Bases -
- Corrosives -
- Oxidizers -
- Other:

Hazardous Decomposition Products:

Ammonia, carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas, oxalic acid.

SECTION 6: HEALTH HAZARD DATA

To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated. Presented below are specific data on each of the subcomponent ingredients:

<u>Hazardous Component</u>	<u>%</u>	<u>Threshold Limit Value</u>	<u>TXDS</u>
Ammonium Oxalate	0.8%	N/AV	N/AV
Crystal Violet	2.0%	N/AV	ORL-RAT LD50: 420 mg/kg (possible carcinogen)
Ethanol	20.0%	1000 ppm	N/AV

Effects of Overexposure (Acute and Chronic):
POISON

May cause severe damage to kidneys if ingested. Will cause irritation to eyes, skin, mucous membranes and upper respiratory tract. Prolonged exposure can cause: nausea, headache and vomiting.

Carcinogenicity: These products do not contain any carcinogens at 0.1% or greater.

First Aid Procedure:

- Skin Contact:** Flush with water, wash with soap and water.
Eye Contact: Flush with water for 15 minutes, get immediate medical attention.
Inhalation: Remove to fresh air. If not breathing, give artificial respiration; if breathing is difficult, give oxygen; seek medical attention.
Ingestion: Do not induce vomiting. Seek medical attention.

In all cases of overexposure seek medical attention.
 Wash contaminated clothing before reuse.

SECTION 7: SPILL OR LEAK PROCEDURES AND DISPOSAL

Steps to be taken if Material is Released or Spilled:

Ventilate area; Using protective clothing and gloves, take up with absorbent. Wash spill site after material pick up is complete.

Waste Disposal Method:

Observe all local, provincial, state, and federal regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

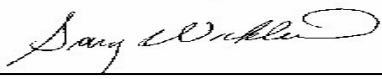
Provide adequate general mechanical and local exhaust ventilation.
 Avoid prolonged or repeated inhalation of vapor.
 Protect eyes, skin, and clothing with safety goggles and gloves.
 Wash thoroughly after handling.

SECTION 9: SPECIAL HANDLING AND STORAGE PRECAUTIONS

Keep container tightly closed. Protect against any physical damage. Store in a cool, dry place, away from oxidizing material.

SECTION 10: MSDS PREPARATION AND INFORMATION

Date Issued: 9/89
 Current Revision: 3/05
 Revised By: Gary Wicklund

Authorized Signature: 

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