Material Safety Data Sheet
Gentian Violet

ACC# 10350

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Gentian Violet  
**Catalog Numbers:** A4213197, C581-100, C581-25, G12-100, NC9611056, SG20-1GALD, SG20-250D, XXC5812KG  
**Synonyms:** Aniline violet; Crystal violet; Hexamethyl pararosaniline chloride.  
**Company Identification:**  
Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410  
**For information, call:** 201-796-7100  
**Emergency Number:** 201-796-7100  
**For CHEMTREC assistance, call:** 800-424-9300  
**For International CHEMTREC assistance, call:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>548-62-9</td>
<td>C.I. BASIC VIOLET 1</td>
<td>~100.0</td>
<td>208-953-6</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** XN  
**Risk Phrases:** 22 41

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: green solid. May cause severe eye irritation and possible injury. May cause skin irritation. May cause respiratory and digestive tract irritation. May cause reproductive and fetal effects. **Warning!** Harmful if swallowed.  
**Target Organs:** None known.

**Potential Health Effects**  
**Eye:** May cause severe eye irritation. This product contains a cationic dye. Similar dyes have caused permanent injury to the cornea and conjunctiva in documented exposure cases with human or rabbit eyes.  
**Skin:** May cause skin irritation.  
**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea.  
**Inhalation:** May cause respiratory tract irritation.  
**Chronic:** No information found.

Section 4 - First Aid Measures
**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically.

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### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. Combustion generates toxic fumes.

**Extinguishing Media:** For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

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### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

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### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. May form flammable dust-air mixtures. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Do not store in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances.

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### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
</table>

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OSHA Vacated PELs: C.I. BASIC VIOLET 1: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: 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: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: green
Odor: none reported
pH: Not available.
Vapor Pressure: Negligible.
Vapor Density: Not applicable.
Evaporation Rate: Negligible.
Viscosity: Not available.
Boiling Point: Not applicable.
Freezing/Melting Point: Not available.
Decomposition Temperature: Not available.
Solubility: Soluble in water.
Specific Gravity/Density: Not available.
Molecular Formula: C25H30CIN3
Molecular Weight: 407.6831

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Materials containing similar functional groups can decompose at elevated temperatures.
Conditions to Avoid: Incompatible materials, dust generation.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: 
CAS# 548-62-9: BO9000000
LD50/LC50:
CAS# 548-62-9:
Oral, mouse: LD50 = 96 mg/kg;
Oral, rabbit: LD50 = 150 mg/kg;
Oral, rat: LD50 = 420 mg/kg;

**Carcinogenicity:**
CAS# 548-62-9: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.

**Teratogenicity:** Embryo or Fetus: Stunted fetus, oral-rabbit TDLo=7mg/kg. Specific Developmental Abnormalities: Musculoskeletal, oral-rat TDLo=100mg/kg.

**Reproductive Effects:** Fertility: Post-implantation mortality, oral-rat TDLo=40mg/kg.

**Neurotoxicity:** No information available.

**Mutagenicity:** Please refer to RTECS# BO9000000 for specific information.

**Other Studies:** None.

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**Section 12 - Ecological Information**

**Ecotoxicity:** No data available. No information available.

**Environmental:** No information reported.

**Physical:** No information available.

**Other:** No information available.

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**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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**Section 14 - Transport Information**

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<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
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<td><strong>Hazard Class</strong></td>
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<td><strong>UN Number</strong></td>
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<tr>
<td><strong>Packing Group</strong></td>
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**Section 15 - Regulatory Information**

**US FEDERAL**

**TSCA**
CAS# 548-62-9 is listed on the TSCA inventory.

**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.

SARA Codes

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any
Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of
the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals
in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 548-62-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
XN

Risk Phrases:
R 22 Harmful if swallowed.
R 41 Risk of serious damage to eyes.

Safety Phrases:
S 22 Do not breathe dust.
S 26 In case of contact with eyes, rinse immediately
with plenty of water and seek medical advice.

WGK (Water Danger/Protection)
CAS# 548-62-9: 2

Canada - DSL/NDSL
CAS# 548-62-9 is listed on Canada’s DSL List.

Canada - WHMIS
This product has a WHMIS classification of D1B, D2B.

Canadian Ingredient Disclosure List
CAS# 548-62-9 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

Section 16 - Additional Information
MSDS Creation Date: 11/11/1997
Revision #2 Date: 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.