



Part of Thermo Fisher Scientific

# Material Safety Data Sheet

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Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** GRAM CRYSTAL VIOLET  
**Cat No.** R40052, R40053, R40073  
**Synonyms** No information available.  
**Recommended Use** Laboratory chemicals  
**Company** Remel  
12076 Santa Fe Drive  
Lenexa, KS 66215 United States  
Telephone: 1-800-255-6730  
Fax:1-800-621-8251  
**Emergency Telephone Number**  
INFOTRAC 1-352-323-3500  
(International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

### WARNING!

#### Emergency Overview

Flammable Liquid. May cause central nervous system effects. Vapors may cause drowsiness and dizziness. May cause eye, skin, and respiratory tract irritation. Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**Appearance** Purple

**Physical State** Liquid

**Odor** No information available

### Target Organs

Blood, Reproductive System, Gastrointestinal tract (GI), Central nervous system (CNS), Eyes, Respiratory system, Liver, Skin, Optic nerve

### Potential Health Effects

#### Acute Effects

#### Principle Routes of Exposure

**Eyes**

May cause irritation

**Skin**

May cause irritation

**Inhalation**

Vapor harmful.

**Ingestion**

Poison, may be fatal or cause blindness if swallowed. Cannot be made non-poisonous.

### Chronic Effects

Avoid repeated exposure

See Section 11 for additional Toxicological information.

### Aggravated Medical Conditions

Central nervous system disorders. Gastrointestinal tract. Preexisting eye disorders. Liver disorders. Skin disorders.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Haz/Non-haz

Component	CAS-No	Weight %
Ethyl alcohol	64-17-5	20.0
Phenol	108-95-2	< 1.0
C.I. Basic violet 1	548-62-9	< 1.0
Methyl alcohol	67-56-1	1.0

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Rinse immediately with plenty of water and seek medical advice.
<b>Inhalation</b>	Move to fresh air
<b>Ingestion</b>	Clean mouth with water. Consult a physician. Never give anything by mouth to an unconscious person.
<b>Notes to Physician</b>	Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	36.1°C / 97°F
<b>Method</b>	No information available.
<b>Autoignition Temperature</b>	No information available.
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Unsuitable Extinguishing Media</b>	No information available.
<b>Hazardous Combustion Products</b>	No information available.
<b>Sensitivity to mechanical impact</b>	No information available.
<b>Sensitivity to static discharge</b>	No information available.

#### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition

#### 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

**NFPA**                      **Health** 1                      **Flammability** 2                      **Instability** 0                      **Physical hazards** N/A

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**                      Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for Containment and Clean Up** No information available

**7. HANDLING AND STORAGE**

**Handling** Ensure adequate ventilation. Do not breathe vapors or spray mist. Keep container tightly closed. Ensure adequate ventilation. Take precautionary measures against static discharges.

**Storage** Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol	TWA: 1000 ppm	(Vacated) TWA: 1900 mg/m <sup>3</sup> (Vacated) TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup> TWA: 1000 ppm	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>
Phenol	TWA: 5 ppm Skin	(Vacated) TWA: 5 ppm (Vacated) TWA: 19 mg/m <sup>3</sup> Skin TWA: 5 ppm TWA: 19 mg/m <sup>3</sup>	IDLH: 250 ppm TWA: 5 ppm TWA: 19 mg/m <sup>3</sup> Ceiling: 60 mg/m <sup>3</sup> Ceiling: 15.6 ppm
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m <sup>3</sup> (Vacated) STEL: 325 mg/m <sup>3</sup> (Vacated) STEL: 250 ppm Skin TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 325 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Ethyl alcohol	TWA: 1000 ppm TWA: 1880 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>	TWA: 1000 ppm TWA: 1900 mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Phenol	TWA: 19 mg/m <sup>3</sup> TWA: 5 ppm Skin	TWA: 19 mg/m <sup>3</sup> TWA: 5 ppm STEL: 10 ppm STEL: 38 mg/m <sup>3</sup>	TWA: 19 mg/m <sup>3</sup> TWA: 5 ppm Skin
Methyl alcohol	TWA: 200 ppm TWA: 262 mg/m <sup>3</sup> STEL: 328 mg/m <sup>3</sup> STEL: 250 ppm Skin	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 250 ppm STEL: 310 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 325 mg/m <sup>3</sup> STEL: 250 ppm Skin

**NIOSH IDLH:** Immediately Dangerous to Life or Health

#### 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 Antistatic boots. Wear fire/flame resistant/retardant clothing. Impervious gloves.

##### **Skin and body protection**

##### **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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Appearance</b>	Purple
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available.
<b>pH</b>	3.0 - 5.5
<b>Vapor Pressure</b>	No information available.
<b>Vapor Density</b>	No information available.
<b>Viscosity</b>	No information available.
<b>Boiling Point/Range</b>	No information available.
<b>Melting Point/Range</b>	No information available.
<b>Decomposition temperature °C</b>	No information available.
<b>Flash Point</b>	36.1°C / 97°F
<b>Evaporation Rate</b>	No information available.
<b>Specific Gravity</b>	No information available.
<b>Solubility</b>	No information available.
<b>log Pow</b>	No data available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Keep away from open flames, hot surfaces and sources of ignition. Heating in air.
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	None under normal use
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur
<b>Hazardous Reactions .</b>	None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl alcohol	7060 mg/kg ( Rat )	Not listed	Not listed
Phenol	317 mg/kg ( Rat )	525 mg/kg ( Rat ) 630 mg/kg ( Rabbit )	316 mg/m <sup>3</sup> ( Rat ) 4 h
C.I. Basic violet 1	420 mg/kg ( Rat )	Not listed	Not listed
Methyl alcohol	5628 mg/kg ( Rat )	15800 mg/kg ( Rabbit )	64000 ppm ( Rat ) 4 h 83.2 mg/L ( Rat ) 4 h

**Irritation** No information available.

**Toxicologically Synergistic Products** No information available.

### Chronic Toxicity

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Mexico
Ethyl alcohol	Not listed	Group 1	Not listed	X	Not listed

**IARC: (International Agency for Research on Cancer)**

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Endocrine Disruptor Information** No information available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethyl alcohol	Not listed	Not listed	= 34634 mg/L EC50 Photobacterium phosphoreum 30 min = 35470 mg/L EC50 Photobacterium phosphoreum 5 min	LC50 48 h 9268 mg/L EC50 24 h 10800 mg/L LC50 48 h 9268 mg/L
Phenol	EC50 96 h 150 mg/L	Not listed	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	EC50 48 h 23.0 mg/L LC50 48 h 13 mg/L EC50 48 h 23.0 mg/L
Methyl alcohol	Not listed	Not listed	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	Not listed

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available

**Mobility**

Component	log Pow
Ethyl alcohol	-0.32
Phenol	1.47
Methyl alcohol	-0.77

**13. DISPOSAL CONSIDERATIONS**

**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
Phenol - 108-95-2	U188	-
Methyl alcohol - 67-56-1	U154	-

**14. TRANSPORT INFORMATION**

**DOT**  
**Proper Shipping Name** Not regulated  
 AQUEOUS ALCOHOL SOLUTION: NOT REGULATED BY CONFORMING TO 49CFR 173.150(E)

**TDG**  
**UN-No** UN1170  
**Proper Shipping Name** ETHANOL SOLUTION  
**Hazard Class** 3  
**Packing Group** III

**IATA**  
**UN-No** UN1170  
**Proper Shipping Name** ETHANOL SOLUTION

**14. TRANSPORT INFORMATION**

**Hazard Class**                    3  
**Packing Group**                III

**IMDG/IMO**                                Not determined

**15. REGULATORY INFORMATION**

**International Inventories**

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Ethyl alcohol	X	X	-	200-578-6	-		X	X	X	X	KE-13217 X
Phenol	X	X	-	203-632-7	-		X	X	X	X	KE-28209 X
C.I. Basic violet 1	X	X	-	208-953-6	-		X	X	X	X	KE-07006 X
Methyl alcohol	X	X	-	200-659-6	-		X	X	X	X	KE-23193 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 %
Phenol	108-95-2	< 1.0	1.0
Methyl alcohol	67-56-1	1.0	1.0

**SARA 311/312 Hazardous Categorization**  
**Acute Health Hazard**

No

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

**Clean Water Act**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Phenol	X	1000 lb	X	X

**Clean Air Act**

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

**OSHA**

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
Phenol	1000 lb	1000 lb
Methyl alcohol	5000 lb	-

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL
Ethyl alcohol	64-17-5	Developmental	-

**State Right-to-Know**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl alcohol	X	X	X	-	X
Phenol	X	X	X	X	X
Methyl alcohol	X	X	X	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** Serious risk, Grade 3

**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**

B2 Flammable liquid

D2A Very toxic materials

**16. OTHER INFORMATION**

<b>Prepared By</b>	Regulatory Affairs Remel Tel: 1-800-255-6730
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**Disclaimer**

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**End of MSDS**