

# **SAFETY DATA SHEET**

Creation Date 01-Oct-2009 Revision Date 28-Jun-2022 Revision Number 13

1. Identification

Product Name Gram Crystal Violet

Cat No.: R40052, R40053, R40073

Synonyms No information available

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

#### Details of the supplier of the safety data sheet

#### 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 - 24 Hour Number: 1-800-535-5053

Outside of the United States, call 24 Hour Number: 001-352-323-3500 (Call

Collect)

# 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 3
Carcinogenicity Category 1B

#### Label Elements

# Signal Word

Danger

#### **Hazard Statements**

Flammable liquid and vapor May cause cancer



# **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

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-sparking tools

Take precautionary measures against static discharge

Response

IF exposed or concerned: Get medical attention/advice

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

Storage

Store locked up

Store in a well-ventilated place. Keep cool

Disposal

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Harmful to aquatic life with long lasting effects

WARNING. Cancer and Reproductive Harm - https://www.p65warnings.ca.gov/.

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Phenol	108-95-2	< 1.0
Ethyl alcohol	64-17-5	14
Methyl alcohol	67-56-1	<1.0
Isopropyl alcohol	67-63-0	<1.0
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	548-62-9	<1.0

# 4. First-aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In

the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

**Skin Contact** Rinse immediately with plenty of water and seek medical advice.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and

effects

Notes to Physician

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire

Flash Point 38.9 °C / 102 °F

Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

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

#### **Hazardous Combustion Products**

None known.

#### **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. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
3	2	0	N/A

# 6. Accidental release measures

Personal Precautions Ensure adequate ventilation. Use personal protective equipment as required. Keep people

away from and upwind of spill/leak. Evacuate personnel to safe areas. Remove all sources

of ignition. Take precautionary measures against static discharges.

**Environmental Precautions**Collect spillage. Dispose of in accordance with local regulations.

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

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Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on

clothing. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static

discharges.

Storage. Keep in properly labeled containers. Keep container tightly closed in a dry and

well-ventilated place. Keep away from heat, sparks and flame.

# 8. Exposure controls / personal protection

#### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Phenol	TWA: 5 ppm Skin	(Vacated) TWA: 5 ppm (Vacated) TWA: 19 mg/m <sup>3</sup>	IDLH: 250 ppm TWA: 5 ppm	TWA: 5 ppm
		Skin TWA: 5 ppm TWA: 19 mg/m³	TWA: 19 mg/m³ Ceiling: 15.6 ppm Ceiling: 60 mg/m³	
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	STEL: 1000 ppm
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	TWA: 200 ppm STEL: 250 ppm
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	(Vacated) TWA: 400 ppm (Vacated) TWA: 980 mg/m³ (Vacated) STEL: 500 ppm (Vacated) STEL: 1225 mg/m³ TWA: 400 ppm TWA: 980 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 980 mg/m³ STEL: 500 ppm STEL: 1225 mg/m³	TWA: 200 ppm STEL: 400 ppm

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists OSHA - Occupational Safety and Health Administration NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures Ensure adequate ventilation, especially in confined areas. Use explosion-proof

electrical/ventilating/lighting equipment.

**Personal Protective Equipment** 

**Eye/face Protection** If splashes are likely to occur:. Tight sealing safety goggles.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**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.

Hygiene Measures When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area

and clothing.

# 9. Physical and chemical properties

Physical State Liquid
Appearance Purple
Odor No info

Odor
Odor Threshold
No information available
No data available
No information available
Soiling Point/Range
No information available
Flash Point
38.9 °C / 102 °F
Evaporation Rate
No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

Upper
Lower
No data available
No data available
No data available
No information available
Vapor Density
No information available
Specific Gravity
No information available
Solubility
No information available
Partition coefficient; n-octanol/water
No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

VOC Content(%) 16.9997

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Heating in air. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products None under normal use conditions

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions**None under normal processing.

# 11. Toxicological information

**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
Phenol	LD50 = 340 mg/kg (Rat)	LD50 = 630 mg/kg ( Rabbit )	Not listed
Ethyl alcohol	LD50 = 7060 mg/kg (Rat)	Not listed	20000 ppm/10H ( Rat )
Methyl alcohol	LD50 = 1187 - 2769 mg/kg (Rat)	LD50 = 17100 mg/kg ( Rabbit )	LC50 = 128.2 mg/L (Rat) 4 h
Isopropyl alcohol	5045 mg/kg(Rat) 3600 mg/kg(Mouse)	12800 mg/kg (Rat)	72.6 mg/L (Rat) 4 h
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	LD50 = 420 mg/kg (Rat)	Not listed	Not listed

**Toxicologically Synergistic** 

No information available

**Products** 

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

Irritation No information available

**Sensitization** No information available

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

Ethanol has been shown to be carcinogenic in long-term studies only when consumed and abused as an alcoholic beverage. 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).

Revision Date 28-Jun-2022 **Gram Crystal Violet** 

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Phenol	108-95-2	Not listed				
Ethyl alcohol	64-17-5	Not listed	Known	A3	Not listed	A3
Methyl alcohol	67-56-1	Not listed				
Isopropyl alcohol	67-63-0	Not listed				
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	548-62-9	Group 2B	Not listed	Not listed	Х	Not listed

IARC (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

Hygienists)

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human

Carcinogen

A1 - Known Human Carcinogen A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen A5 - Not Suspected as a Human Carcinogen

Mexico - Occupational Exposure Limits - Carcinogens

ACGIH: (American Conference of Governmental Industrial

No information available **Mutagenic Effects** 

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** No information available

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting delayed

**Endocrine Disruptor Information** No information available

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

# 12. Ecological information

## **Ecotoxicity**

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

Component Fr	reshwater Algae	Freshwater Fish	Microtox	Water Flea
Phenol EC50: stat  EC5 (Ps	: 187 - 279 mg/L, 72h titic (Desmodesmus subspicatus) 50: 0.0188 - 0.1044 mg/L, 96h static eseudokirchneriella subcapitata) 0: = 46.42 mg/L, 96h eseudokirchneriella subcapitata)	4-7 mg/L LC50 96 h 32 mg/L LC50 96 h	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min	EC50: 10.2 - 15.5 mg/L, 48h

Ethyl alcohol	EC50 (72h) = 275 mg/l	Fathead minnow	Photobacterium	EC50 = 9268  mg/L/48h
	(Chlorella vulgaris)	(Pimephales promelas)	phosphoreum:EC50 = 34634	EC50 = 10800  mg/L/24h
		LC50 = 14200 mg/l/96h	mg/L/30 min	_
			Photobacterium	
			phosphoreum:EC50 = 35470	
			mg/L/5 min	
Methyl alcohol	Not listed	Pimephales promelas: LC50	EC50 = 39000 mg/L 25 min	EC50 > 10000 mg/L 24h
		> 10000 mg/L 96h	EC50 = 40000 mg/L 15 min	
		_	EC50 = 43000 mg/L 5 min	
Isopropyl alcohol	EC50: > 1000 mg/L, 72h	LC50: = 9640 mg/L, 96h	= 35390 mg/L EC50	13299 mg/L EC50 = 48 h
	(Desmodesmus	flow-through (Pimephales	Photobacterium	9714 mg/L EC50 = 24 h
	subspicatus)	promelas)	phosphoreum 5 min	_
	EC50: > 1000 mg/L, 96h	LC50: > 1400000 µg/L, 96h		
	(Desmodesmus	(Lepomis macrochirus)		
	`subspicatus)	LC50: = 11130 mg/L, 96h		
	, ,	static (Pimephales		
		promelas)		
		LC50: = 10000000 µg/L, 96h		
		(Daphnia)		
		( - 1, - 1, - 1, - 1, - 1, - 1, - 1, - 1		

Persistence and Degradability

No information available

**Bioaccumulation/ Accumulation** 

No information available.

Mobility

Component	log Pow
Phenol	1.47
Ethyl alcohol	-0.32
Methyl alcohol	-0.74
Isopropyl alcohol	0.05
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	1.172

# 13. Disposal considerations

**Waste Disposal Methods** 

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes		
Phenol - 108-95-2	U188	-		
Methyl alcohol - 67-56-1	U154	-		

# 14. Transport information

DOT

**UN-No** 1170

Proper Shipping Name AQUEOUS ALCOHOL SOLUTION: NOT REGULATED BY CONFORMING TO

49CFR 173.150(E)

Hazard Class 3
Packing Group III

TDG

UN-No UN1170

Proper Shipping Name Ethanol solution

Hazard Class 3
Packing Group III

**IATA** 

**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 3

Packing Group

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# 15. Regulatory information

#### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Phenol	108-95-2	X	ACTIVE	-
Ethyl alcohol	64-17-5	X	ACTIVE	-
Methyl alcohol	67-56-1	Х	ACTIVE	-
Isopropyl alcohol	67-63-0	X	ACTIVE	-
C.I. Basic Violet 3 (with >/= 0.1%	548-62-9	X	ACTIVE	-
Michler's ketone)				

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical

Not applicable

Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

#### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Phenol	108-95-2	Х	-	203-632-7	Х	Х	Х	Х	Х	KE-28209
Ethyl alcohol	64-17-5	Х	-	200-578-6	Х	Х	Х	Х	Х	KE-13217
Methyl alcohol	67-56-1	Х	-	200-659-6	Х	Х	Х	Х	Х	KE-23193
Isopropyl alcohol	67-63-0	Х	-	200-661-7	Х	Х	Х	Х	Х	KE-29363
C.I. Basic Violet 3 (with >/= 0.1%	548-62-9	Х	-	208-953-6	Х	Х	Х	Х	Х	KE-07006
Michler's ketone)										

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

# **SARA 313**

3ARA 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
Isopropyl alcohol	67-63-0	<1.0	1.0

# SARA 311/312 Hazard Categories See section 2 for more information

**CWA (Clean Water Act)** 

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Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
	Gabotanoo	Quantitioo		
Phenol	l 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** - Occupational Safety and Not applicable

#### Health Administration

#### **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	Category
Ethyl alcohol	64-17-5	Development (alcoholic	-	Developmental
,		beverages only)		Carcinogen
Methyl alcohol	67-56-1	Developmental	-	Developmental
C.I. Basic Violet 3 (with	548-62-9	Carcinogen	-	Carcinogen
>/= 0.1% Michler's				
ketone)				

# U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Phenol	X	X	X	X	X
Ethyl alcohol	X	X	X	X	X
Methyl alcohol	X	X	X	X	X
Isopropyl alcohol	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

Moderate risk, Grade 2

# Authorisation/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Phenol	108-95-2	-	Use restricted. See item 75. (see link for restriction details)	-
Ethyl alcohol	64-17-5	-	-	-
Methyl alcohol	67-56-1	-	Use restricted. See item 69. (see link for restriction details)	-
Isopropyl alcohol	67-63-0	-	Use restricted. See item 75. (see link for restriction details)	-
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	548-62-9	-	Use restricted. See item 28.	SVHC Candidate list - 208-953-6 - Carcinogenic,

(see link for restriction Article 57a
details)
Use restricted. See item
72.
(see link for restriction
details)
Use restricted. See item
75.
(see link for restriction
details)

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

https://echa.europa.eu/authorisation-list

https://echa.europa.eu/substances-restricted-under-reach

https://echa.europa.eu/candidate-list-table

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Phenol	108-95-2	Listed	Not applicable	Not applicable	Not applicable
Ethyl alcohol	64-17-5	Listed	Not applicable	Not applicable	Not applicable
Methyl alcohol	67-56-1	Listed	Not applicable	Not applicable	Not applicable
Isopropyl alcohol	67-63-0	Listed	Not applicable	Not applicable	Not applicable
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	548-62-9	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Phenol	108-95-2	Not applicable	Not applicable	Not applicable	Annex I - Y39
Ethyl alcohol	64-17-5	Not applicable	Not applicable	Not applicable	Annex I - Y42
Methyl alcohol	67-56-1	500 tonne	5000 tonne	Not applicable	Not applicable
Isopropyl alcohol	67-63-0	Not applicable	Not applicable	Not applicable	Annex I - Y42
C.I. Basic Violet 3 (with >/= 0.1% Michler's ketone)	548-62-9	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

Remel

Tel: 1-800-255-6730

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 01-Oct-2009

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 Print Date
 28-Jun-2022

Revision Summary

This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

# **End of SDS**