

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product Identifier**

Perihal Produk: **Crystal Violet SS**  
Product Description: **Crystal Violet SS**  
Cat No. : R455292

**Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use Laboratory chemicals.  
Uses advised against No Information available

**Details of the supplier of the safety data sheet**

Company Thermo Scientific Microbiology Sdn Bhd  
No.6, Jalan TTC 6, Taman Teknologi Cheng,  
Cheng, 75250 Melaka, Malaysia  
+606 334 0975 .

Supplier Remel  
12076 Santa Fe Drive Lenexa,  
KS 66215 United States  
Telephone: 1-800-255-6730  
Fax:1-800-621-8251

E-mail address mbd-sds@thermofisher.com

**Emergency Telephone Number**

(603) 5122 8888  
CHEMTREC Malaysia **1-800-815-308** (Malay)  
CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the substance or mixture****Label Elements****Hazard Statements****Precautionary Statements****Other Hazards**

This product does not contain any known or suspected endocrine disruptors

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

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| Component   | CAS No     | Weight % |
|---|------------|----------|
| Yeast, ext.   | 8013-01-2  | 9.48     |
| .beta.-D-Glucopyranosiduronic acid, 4-methyl-2-oxo-2H-1-benzopyran-7-yl | 6160-80-1  | 0.72     |
| Gelatins, hydrolyzates  | 68410-45-7 | 21.33    |
| Neutral Red   | 553-24-2   | 0.1      |
| Crystal Violet SS   | 548-62-9   | 0.01     |
| Bile salt mixture for microbiology                                      | NA         | 4.03     |
| .beta.-D-Lactose  | 63-42-3    | 27.25    |
| Sodium chloride   | 7647-14-5  | 11.85    |
| Sodium carbonate  | 497-19-8   | 0.36     |
| Agar  | 9002-18-0  | 24.88    |
| NONHAZARDOUS  | NA         | 100      |

## SECTION 4: FIRST AID MEASURES

### Description of first aid measures

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Self-Protection of the First Aider

No special precautions required.

### Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

### Indication of any immediate medical attention and special treatment needed

#### Notes to Physician

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### Extinguishing media

#### Suitable Extinguishing Media

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

#### Extinguishing media which must not be used for safety reasons

No information available.

### Special hazards arising from the substance or mixture

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

#### Hazardous Combustion Products

None under normal use conditions.

### Advice for fire-fighters

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As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

### Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

### Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

### Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

### Specific End Uses

Use in laboratories.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

### Exposure Controls

#### Engineering Measures

None under normal use conditions.

### Personal protective equipment

#### Eye Protection

Wear safety glasses with side shields (or goggles)

#### Hand Protection

Protective gloves

#### Skin and body protection

Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g.

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sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

## Respiratory Protection

### Recommended Filter type:

No protective equipment is needed under normal use conditions

Particle filter

## Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

## Environmental exposure controls

No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

#### Appearance

#### Physical State

Powder Solid

#### Odor

No information available

#### Odor Threshold

No data available

#### pH

No information available

#### Melting Point/Range

No data available

#### Softening Point

No data available

#### Boiling Point/Range

No information available

#### Flash Point

No information available

Method - No information available

#### Evaporation Rate

Not applicable

Solid

#### Flammability (solid,gas)

No information available

#### Explosion Limits

No data available

#### Vapor Pressure

No data available

#### Vapor Density

Not applicable

Solid

#### Specific Gravity / Density

No data available

#### Bulk Density

No data available

#### Water Solubility

No information available

#### Solubility in other solvents

No information available

#### Partition Coefficient (n-octanol/water)

#### Component

#### log Pow

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1.172

#### Autoignition Temperature

No data available

#### Decomposition Temperature

No data available

#### Viscosity

Not applicable

Solid

#### Explosive Properties

No information available

#### Oxidizing Properties

No information available

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## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

None known, based on information available.

### Chemical Stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

#### **Hazardous Polymerization Hazardous Reactions**

Hazardous polymerization does not occur.  
None under normal processing.

### Conditions to Avoid

Incompatible products. Excess heat. Avoid dust formation.

### Incompatible Materials

None known.

### Hazardous Decomposition Products

None under normal use conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

#### Toxicology data for the components

| Component         | LD50 Oral                | LD50 Dermal                   | LC50 Inhalation            |
|-------------------|--------------------------|-------------------------------|----------------------------|
| Crystal Violet SS | LD50 = 420 mg/kg ( Rat ) |                               |                            |
| .beta.-D-Lactose  | LD50 > 10 g/kg ( Rat )   |                               |                            |
| Sodium chloride   | LD50 = 3 g/kg ( Rat )    | LD50 > 10000 mg/kg ( Rabbit ) | LC50 > 42 mg/L ( Rat ) 1 h |
| Sodium carbonate  | 2800 mg/kg ( Rat )       | > 2000 mg/kg (rabbit)         | 2.3 mg/l 2h (Rat)          |
| Agar              | LD50 = 11 g/kg ( Rat )   |                               |                            |

#### Chronic Toxicity

##### **Carcinogenicity**

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

| Component         | IARC     | UK |
|-------------------|----------|----|
| Crystal Violet SS | Group 2B |    |

#### **Legend:**

X - Listed 'X' - Not Listed PMN - Indicates a commenced PMN substance 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))

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**Sensitization** No information available  
**Mutagenic Effects** No information available  
**Reproductive Effects** No information available  
**Developmental Effects** No information available  
**Target Organs** No information available.

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

| Component        | Freshwater Fish   | Water Flea                               | Freshwater Algae | Microtox |
|------------------|---|--|------------------|----------|
| Sodium chloride  | Pimephals prome:<br>LC50: 7650 mg/L/96h   | EC50: 1000 mg/L/48h                      |                  |          |
| Sodium carbonate | Lepomis macrochirus:<br>LC50: 300 mg/L/96h<br>Gambusia affinis: LC50:<br>740 mg/L/96h | EC50: = 265 mg/L, 48h<br>(Daphnia magna) |                  | -        |

**Persistence and degradability** No information available

**Bioaccumulative potential** No information available

| Component         | log Pow | Bioconcentration factor (BCF) |
|-------------------|---------|-------------------------------|
| Crystal Violet SS | 1.172   | No data available             |

**Mobility in soil** No information available.

**Other adverse effects** No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste from Residues/Unused Products** Dispose of in accordance with local regulations

**Contaminated Packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal

## SECTION 14: TRANSPORT INFORMATION

**IMDG/IMO** Not regulated

**Road and Rail Transport** Not regulated

**IATA** Not regulated

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**Special Precautions for User** No special precautions required

## SECTION 15: REGULATORY INFORMATION

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

**International Inventories** X = listed

| Component   | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | IECSC | AICS | KECL       |
|---|--------|------|-----|-------|------|------|-------|------|------------|
| Yeast, ext.   | -      | X    | X   | X     | -    |      | X     | X    | KE-05-1355 |
| .beta.-D-Glucopyranosiduronic acid, 4-methyl-2-oxo-2H-1-benzopyran-7-yl | -      | X    | X   | -     | -    |      | X     | X    | KE-24656   |
| Gelatins, hydrolyzates  | -      | X    | X   | X     | -    |      | X     | X    | KE-17576   |
| Neutral Red   | -      | X    | X   | X     | -    |      | X     | X    | -          |
| Crystal Violet SS   | -      | X    | X   | X     | X    | X    | X     | X    | KE-07006   |
| .beta.-D-Lactose  | -      | X    | X   | X     | -    | X    | X     | X    | KE-17416   |
| Sodium chloride   | -      | X    | X   | X     | X    | X    | X     | X    | KE-31387   |
| Sodium carbonate  | -      | X    | X   | X     | X    | X    | X     | X    | KE-31380   |
| Agar  | -      | X    | X   | X     | -    |      | X     | X    | KE-00275   |

## National Regulations

**Persistent Organic Pollutant** This product does not contain any known or suspected substance  
**Ozone Depletion Potential** This product does not contain any known or suspected substance

## SECTION 16: OTHER INFORMATION

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**POW** - Partition coefficient Octanol:Water

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

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## Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Revision Date 29-Mar-2023  
Revision Summary Not applicable.

**In accordance with local and national regulations: Occupational Safety and Health  
(Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013**

## 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 Safety Data Sheet**