# Material Safety Data Sheet

according to EC-Regulation No. 1272/2008  
updated: 01/2018  Version: 1.0

## Section I - Product and Company Information

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Crystal Violet Cytotoxicity Assay Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Number</td>
<td>PK-CA577-K329</td>
</tr>
<tr>
<td>Product Classification</td>
<td>Cell Biology Reagents</td>
</tr>
</tbody>
</table>
| Company and Contact Information | PromoCell GmbH  
Sickingenstrasse 63/65  
69126 Heidelberg  
Germany  
Phone: +49 6221 – 649 34 0  
E-mail: info@promokine.info |

## Section II – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Product Name/Chemical Name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>MW</th>
<th>Chemical Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>67-68-5</td>
<td>200-664-3</td>
<td>78.13</td>
<td>C2H6OS</td>
</tr>
<tr>
<td>SDS</td>
<td>151-21-3</td>
<td>205-788-1</td>
<td>288.38</td>
<td>CH3(CH2)11OSO3Na</td>
</tr>
<tr>
<td>Crystal Violet</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

## Section III – Hazard Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>Volume</th>
<th>Safety Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystal Violet Staining Solution</td>
<td>Contains Crystal Violet</td>
<td>44 ml</td>
<td>See below</td>
</tr>
<tr>
<td>10X Washing Solution</td>
<td>Liquid</td>
<td>115 ml</td>
<td>No hazards</td>
</tr>
<tr>
<td>Solubilization Solution</td>
<td>Contains SDS</td>
<td>100 ml</td>
<td>See below</td>
</tr>
<tr>
<td>20 mM Doxorubicin</td>
<td>In DMSO</td>
<td>100 µl</td>
<td>See below</td>
</tr>
</tbody>
</table>

**SDS:**  
Emergency Overview  
OSHA Hazards: Flammable solid, Target organ effect, Harmful by ingestion, Irritant, Toxic by skin absorption  
Target Organs: Lungs  
GHS Classification: Flammable solids (Category 1); Acute toxicity, Oral (Category 3); Acute toxicity, Dermal (Category 3); Skin irritation (Category 2); Eye irritation (Category 2A); Specific target organ toxicity – single exposure (Category 3); Acute aquatic toxicity (Category 2)  
GHS Label elements, including precautionary statements  
Pictogram:

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**Signal word:** Warning  
**Hazard statement(s):** H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H412 Harmful to aquatic life with long-lasting effects.  
**Precautionary statement(s):** P210 Keep away from heat/sparks/open flames/hot surfaces – no smoking.  
P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container to an approved waste disposal plant.

HMIS Classification
- Health hazard: 2
- Chronic health hazard: *
- Flammability: 3
- Physical hazards: 3

NFPA Rating
- Health Hazard: 2
- Fire: 3
- Reactivity Hazard: 3

Potential Health Effects
- Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
- Skin: Toxic if absorbed through skin. Causes skin irritation.
- Eyes: Causes eye irritation.
- Ingestion: Harmful if swallowed.

Crystal Violet:

Emergency Overview

GHS Classification: Acute toxicity, Oral (Category 4), H302; Serious eye damage (Category 1), H318; Carcinogenicity (Category 2), H351; Acute aquatic toxicity (Category 1), H400; Chronic aquatic toxicity (Category 1), H410

GHS Label elements, including precautionary statements

Pictogram:

Signal word: Danger

Hazard statement(s): H302 Harmful if swallowed.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s): P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear eye protection/face protection.
P281 Use personal protective equipment as required.
P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
P305+P351+P338+P310 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

HMIS Classification
- Health hazard: 2
- Chronic health hazard: *
- Flammability: 0
- Physical hazards: 0

NFPA Rating
- Health Hazard: 2
- Fire: 0
- Reactivity Hazard: 0

Potential Health Effects
- Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
- Skin: Harmful if absorbed through skin. Causes skin irritation.
- Eyes: Causes eye irritation.
- Ingestion: Harmful if swallowed.
DMSO:

Emergency Overview
OSHA Hazards: Combustible liquid, Target organ effect
Target Organs: Eyes, Skin
GHS Classification: Flammable liquids (Category 4)
GHS Label elements, including precautionary statements
Pictogram: none
Signal word: Warning
Hazard statement(s): H227 Combustible liquid
Precautionary statement(s): none
HMIS Classification
Health hazard: 0
Flammability: 2
Physical hazards: 0
NFPA Rating
Health Hazard: 0
Fire: 2
Reactivity Hazard: 0

Potential Health Effects
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.
Aggravated Medical Condition: Avoid contact w/DMSO solutions containing toxic materials with unknown toxicological properties. DMSO is readily absorbed through skin and may carry such materials into the body.

Section IV – First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact: Wash off with soap and plenty of water. Consult a physician.
In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section V – Fire-Fighting Measures

DMSO
Suitable extinguishing media: For small (incipient) fires, use media such as “alcohol” foam, dry chemical or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous combustion products: Hazardous combustion products formed under fire conditions — no data available.
Further information: Use water spray to cool unopened containers.

Section VI – Accidental Release Measures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section VII – Handling and Storage

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: -20 °C
Section VIII – Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values.

**Personal protective equipment**

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin and body protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.

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**Section IX – Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>DMSO</th>
<th>SDS</th>
<th>Crystal Violet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
<td>White solid</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td>7.2</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely miscible</td>
<td>Soluble</td>
<td>No data available</td>
</tr>
<tr>
<td>Other Solubility</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point (°C):</td>
<td>189 °C (372 °F)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point (°C):</td>
<td>16-19 °C (61-66 °F)</td>
<td>204-207 °C (399-405 °F)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point (°C):</td>
<td>87 °C (189 °F)</td>
<td>180 °C (356 °F)</td>
<td>No data available</td>
</tr>
<tr>
<td>Ignition Temperature (°C):</td>
<td>301 °C (574 °F)</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1.1 g/ml</td>
<td>0.370 g/cm³</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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**Section X – Stability and Reactivity**

<table>
<thead>
<tr>
<th>Property</th>
<th>DMSO</th>
<th>SDS</th>
<th>Crystal Violet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical stability</td>
<td>Stable under recommended storage conditions</td>
<td>Heat, Flames, Sparks</td>
<td>No data available</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Heat, Flames, Sparks</td>
<td>Heat, Flames, Sparks: Extremes of temperature and direct sunlight</td>
<td>No data available</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Acid chlorides, Phosphorus halides, Strong acids, Strong oxidizing agents, Strong reducing agents</td>
<td>Oxidizing agents.</td>
<td>Strong oxidizing agents, strong acids, strong bases</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Carbon oxides, sulfur oxides</td>
<td>Carbon oxides, sulfur oxides, sodium oxides</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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**Section XI – Toxicological Information**

**DMSO:**

**Acute toxicity:** LD50 Oral – rat – 14,500 mg/kg

LD50 Inhalation – rat – 4 h – 40250 ppm

LD50 Dermal – rabbit – 5,000 mg/kg

**Skin corrosion/irritation:** Skin – rabbit – no skin irritation – 4h

**Serious eye damage/eye irritation:** Eyes – rabbit – mild eye irritation

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** Genotoxicity in vitro – mouse – lymphocyte: Cytogenetic analysis

Genotoxicity in vitro - mouse – lymphocyte: Mutation in mammalian somatic cells

Genotoxicity in vivo – rat – Intraperitoneal: Cytogenetic analysis

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Genotoxicity in vivo - mouse - Intraperitoneal: DNA damage


IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Reproductive toxicity – rat – Intraperitoneal -> Effects on fertility: abortion
Reproductive toxicity – rat – Intraperitoneal -> Effects on fertility: post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants)
Reproductive toxicity – rat – Subcutaneous -> Effects on fertility: post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants). Effects on fertility: litter size: (e.g. # fetuses per litter, measured before birth)
Reproductive toxicity – mouse - Oral -> Effects on fertility: post-implantation mortality (e.g. reduction in number of implants per female; total number of implants per corpora lutea). Effects on embryo/fetus: Fetotoxicity (expect death, e.g. stunted fetus). Specific developmental abnormalities: musculoskeletal system.

Teratogenicity: Developmental toxicity – mouse – Intraperitoneal: Effects on embryo/fetus: Fetotoxicity (expect death, e.g. stunted fetus). Specific developmental abnormalities: musculoskeletal system

Specific target organ toxicity – single exposure (GHS): no data available
Specific target organ toxicity – repeated exposure (GHS): no data available
Aspiration hazard: no data available

Potential Health Effects:
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed.

Aggravated Medical Condition: Avoid contact with/DMSO solutions containing toxic materials or materials with unknown toxicological properties. DMSO is readily absorbed through skin and may carry such materials into the body.

Signs and Symptoms of Exposure: Effects due to ingestion may include: nausea, fatigue, and/or headache.

Additional information: RTECS: PV6210000

SDS
Acute toxicity: LD50 Oral – rat – 1,288 mg/kg
LC50 Inhalation – rat – 1 h -> 3,900 mg/m3
LC50 Dermal – rabbit – 580 mg/kg
Skin corrosion/irritation: Skin – rabbit - skin irritation – 24 h
Serious eye damage/eye irritation: Eyes - - rabbit – risk of serious damage to eyes. OECD Test Guideline 405.
Respiratory or skin sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: no data available

Carcinogenicity:
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available
Teratogenicity: no data available
Specific target organ toxicity – single exposure (GHS): Inhalation – may cause respiratory irritation.
Specific target organ toxicity – repeated exposure (GHS): no data available
Aspiration hazard: no data available

Potential Health Effects:
Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.
Skin: Toxic if absorbed through skin. Causes skin irritation.
Eyes: Causes eye irritation.
Ingestion: Harmful if swallowed

Synergistic effects: no data available
Additional information: RTECS: WT1050000
**Crystal Violet:**

**Acute toxicity:**
- LD50 Oral – mouse – 96 mg/kg
- LD50 Oral – rabbit – 150 mg/kg

Inhalation: no data available

Dermal: no data available

- LD50 Intraperitoneal – rat – 8.9 mg/kg
- LD50 Intraperitoneal – mouse – 5.1 mg/kg
- LD50 Intraperitoneal – rabbit – 5 mg/kg
- LD50 Intraduodenal – rabbit – 160 mg/kg

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** Severe eye irritation

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** Human
- HeLa cell
- DNA inhibition
- Human
- HeLa cell
- Cytogenetic analysis
- Human
- Lymphocyte
- Cytogenetic analysis
- Rat
- Liver
- DNA inhibition
- Mouse
- Lymphocyte
- DNA damage
- Hamster
- Ovary
- Cytogenetic analysis
- Mammal
- Lymphocyte
- DNA damage
- Mammal
- Other cell types
- Cytogenetic analysis
- Non-mammalian
- Other cell types
- Cytogenetic analysis

**Result:** Equivocal evidence.

**Histidine reversion (Ames)**

**Carcinogenicity:** Limited evidence of a carcinogenic effect.

- **IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

**Specific target organ toxicity – single exposure (GHS):** no data available.

**Specific target organ toxicity – repeated exposure (GHS):** no data available

**Aspiration hazard:** no data available

**Potential Health Effects**

- **Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.
- **Skin:** Harmful if absorbed through skin. Causes skin irritation.
- **Eyes:** Causes eye irritation.
- **Ingestion:** Harmful if swallowed

**Signs and Symptoms of Exposure:** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects:** no data available

**Additional information:** RTECS: no data available

Prolonged or repeated exposure can cause: Nausea, Headache, Vomiting
Section XII – Ecological Information

**SDS:**

**Persistence and degradability:** Biodegradability: Result - > 90% readily biodegradable

**Toxicity:**
- **Toxicity to fish:** mortality NOEC – Oncorhynchus mykiss (rainbow trout) – 19.5 mg/l – 96 h
- Mortality LOEC – Pimephales promelas (fathead minnow) – 4.6 mg/l – 8 d
- LC50 – Oncorhynchus mykiss (rainbow trout) – 3.6 mg/l – 96 h

**Toxicity to algae:** Growth inhibition LOEC – Pseudokirchneriella subcapitata – 2.68 mg/l – 6 d

**Bioaccumulative potential:** Bioaccumulation: Cyprinus carpio (Carp) – 72 h Bioconcentration factor (BCF): 3.9-5-3

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

**Crystal Violet:**

**Persistence and degradability:** no data available

**Toxicity:**
- **Toxicity to daphnia and other aquatic invertebrates**
  - EC50 – Daphnia magna (Water flea) – 0.35 mg/l – 48 h (OECD Test Guideline 202)
  - **Toxicity to algae:** EC50 - Pseudokirchneriella subcapitata – 0.42 mg/l – 72 h (OECD Test Guideline 201)

**Bioaccumulative potential:** Biodegradability: Result: 10% - Not readily biodegradable. Ratio BOD/ThBOD 0.12%

**Mobility in soil:** no data available

**PBT and vPvB assessment:** no data available

**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

**DMSO:**

**Elimination information (persistence and degradability):** no data available

**Ecotoxicity effects:**
- **Toxicity to fish:** LC50 – Pimephales promelas (fathead minnow) – 34,000 mg/l – 96 h
- LC50 – Oncorhynchus mykiss (rainbow trout) – 35,000 mg/l – 96 h

**Toxicity to daphnia and other aquatic invertebrates:** EC50 – Daphnia pulex (water flea) – 27,500 mg/l

**Toxicity to algae:** EC50 – Lepomis macrochirus (Bluegill) -> 400,000 mg/l – 96 h

**Further information on ecology:** no data available

Section XIII – Disposal Information

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging:** Dispose of as unused product.

Section XIV – Transport Information

**SDS**

**DOT (US):** UN-number: 2926, Class: 4.1 (6.1), Packing group: II; Proper shipping name: Flammable solids, toxic, organic, n.o.s. (Sodium dodecyl sulfate); Marine pollutant: No; Poison Inhalation Hazard: No

**IMDG:** UN-number: 2926, Class: 4.1 (6.1), Packing group: II; EMS-No: F-A, S-G; Proper shipping name: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. (Sodium dodecyl sulfate); Marine pollutant: No

**IATA:** UN-number: 2926, Class: 4.1 (6.1), Packing group: II; Proper shipping name: Flammable solids, toxic, organic, n.o.s. (Sodium dodecyl sulfate)

**Crystal Violet:**

**DOT (US):** Not dangerous goods

**IMDG:** UN-number: 3077, Class: 9, packing group: III; EMS-No: F-A, S-F; Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide); Marine pollutant: Yes

**IATA:** UN-number: 3077, Class: 9, Packing group: III; Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (C.I. Basic violet 3)

**DMSO:**

**DOT (US):** UN-Number: 1993 Class: CBL Packing group: III; Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide); Marine pollutant: No; Poison Inhalation Hazard: No

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods
Section XV – Regulatory Information

SARA 302 Components: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.
SARA 311/312 Hazards: Crystal Violet: Acute Health Hazard, DMSO: Acute Health Hazard, Chronic Health Hazard
SDS: Fire Hazard, Acute Health Hazard, Chronic Health Hazard
Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components: DMSO, CAS-No. 67-68-5 Sodium dodecyl sulfate, CAS-No. 151-21-3
Crystal Violet, CAS-No.--
New Jersey Right To Know Components: DMSO, CAS-No. 67-68-5 Sodium dodecyl sulfate, CAS-No. 151-21-3
Crystal Violet, CAS-No.--
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

EU Regulations:

<table>
<thead>
<tr>
<th>Component</th>
<th>Risk Phrases</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>R10, R36/37/38</td>
<td>S24/25, S36/37/39, S45</td>
</tr>
<tr>
<td>SDS</td>
<td>R10, R25, R36/38, R45</td>
<td>S23, S24/25, S26, S45</td>
</tr>
<tr>
<td>Crystal Violet</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Section XVI - Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PromoCell shall not be held liable for any damage resulting from handling or from contact with the above product.

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.

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