



75010.1 - GloCell™ Fixable Viability Dye Violet 510

Revision Date 02-Nov-2018 **Revision Number** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE **COMPANY/UNDERTAKING**

Product identifier				
Product Name	GloCell™ Fixable Viability Dye Violet 510			
Other means of identification				
Catalog Number 75010.1				
Document Number DX22995				
Synonyms None				
Recommended use of the chemical and restrictions on use				

Recommended Use Laboratory reagent

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Details of the supplier of the safety data sheet

Manufacturer/Supplier

STEMCELL Technologies Canada Inc. Suite 500 - 1618 Station Street Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

Emergency Telephone

1-800-667-0322

2. HAZARDS IDENTIFICATION

Classification

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

Flammable liquids

Category 4

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning





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Hazard statements

Combustible liquid

Appearance No information available

Physical state Liquid

Odor No information available

Precautionary Statements - Prevention

Keep away from flames and hot surfaces. - No smoking Wear protective gloves/eye protection/face protection

Precautionary statements - Response

In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Not applicable

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
Dimethyl Sulfoxide (DMSO)	67-68-5	90 - 100

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures





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Inhalation	Remove to fresh air.			
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.			
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.			
Ingestion	Clean mouth with water and drink afterwards plenty of water.			
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).			
Most important symptoms and effects, both acute and delayed				
Symptoms	No information available.			
Indication of any immediate medical attention and special treatment needed				
Note to physicians	Treat symptomatically.			
Note to physicians				
Note to physicians	Treat symptomatically. 5. FIRE-FIGHTING MEASURES			
Note to physicians				
	5. FIRE-FIGHTING MEASURES			
Suitable Extinguishing Media	5. FIRE-FIGHTING MEASURES Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.			
Suitable Extinguishing Media Unsuitable extinguishing media Specific hazards arising from the	 5. FIRE-FIGHTING MEASURES Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. 			

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material.





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Environmental precautions				
Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.			
Methods and material for containment and cleaning up				
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.			
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.			
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.			

7. HANDLING AND STORAGE

Precautions for safe handling	9			
Advice on safe handling	Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation.			
Conditions for safe storage, including any incompatibilities				
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations.			

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls





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Engineering controls Showers Eyewash stations Ventilation systems. Individual protection measures, such as personal protective equipment Eye/face protection Tight sealing safety goggles. No special protective equipment required. Skin and body protection **Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. **General hygiene considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties					
Physical state	Liquid				
Appearance	No information available				
Color	No information available				
Odor	No information available				
Odor threshold	No information available				
Property	Values_	Remarks • Method			
pH	No data available	None known			
Melting point / freezing point	No data available	None known			
Boiling point / boiling range	No data available	None known			
Flash point	87 °C / 189 °F				
Evaporation rate	No data available	None known			
Flammability (solid, gas)	No data available	None known			
Flammability Limit in Air		None known			
Upper flammability limit:	No data available				
Lower flammability limit:	No data available				
Vapor pressure	No data available	None known			
Vapor density	No data available	None known			
Relative density	No data available	None known			
Water solubility	No data available	None known			
Solubility in other solvents	No data available	None known			
Partition coefficient	No data available	None known			
Autoignition temperature	No data available	None known			
Decomposition temperature	No data available	None known			





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Kinematic viscosity Dynamic viscosity Explosive properties Oxidizing properties

Other Information Softening point Molecular weight Molecular formula VOC Content (%) Liquid Density Bulk density No data available No data available No information available No information available

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10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known based on information supplied.

Hazardous decomposition products Carbon oxides. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixtur		Specific test data for the substance or mixture is not available.
Eye contact Specific test data for the substance or mixture		Specific test data for the substance or mixture is not available.
Skin contact Specific test data for the substance or mixture is		Specific test data for the substance or mixture is not available.
Ingestion Specific test data for the substance or mixture is not available		
symptoms related to the physical, chemical and toxicological characteristics		

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity





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Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	14,500.00	mg/kg
ATEmix (dermal)	40,000.00	mg/kg

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown toxicity 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dimethyl Sulfoxide (DMSO) 67-68-5	= 14500 mg/kg (Rat) = 28300 mg/kg (Rat)	= 40 g/kg (Rat)	> 5.33 mg/L (Rat)4 h

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

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity				
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Dimethyl Sulfoxide	EC50: 12350 -	LC50: >40g/L (96h,	-	EC50: =7000mg/L (24h,
(DMSO)	25500mg/L (96h,	Lepomis macrochirus)		Daphnia species)
67-68-5	Skeletonema costatum)	LC50: 33 - 37g/L (96h,		
		Oncorhynchus mykiss)		





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LC50: =41.7g/L (96h,	
Cyprinus carpio) LC50:	
=34000mg/L (96h,	
Pimephales promelas)	

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient	
Dimethyl Sulfoxide (DMSO)	-2.03	
67-68-5		

Other adverse effects

Waata traatmant mathada

No information available.

13. DISPOSAL CONSIDERATIONS

waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
	Not regulated
IMDG	Not regulated
<u>RID</u>	Not regulated





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ADR

Not regulated

ADN

Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

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

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.





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US State Regulations

<u>California Proposition 65</u> This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Dimethyl Sulfoxide (DMSO)	Х	-	-
67-68-5			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By,

Quality Control. STEMCELL Technologies Canada Inc.

Revision Date 02-Nov-2018

Revision Note No information available.

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. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet