



300-0480 - Caspase-3/7 Substrate (200X), Green

Revision Date 17-Sep-2024 Revision Number 1.1

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

Product identifier				
Product Name	Caspase-3/7 Substrate (200X), Green			
Other means of identification				
Catalog Number	300-0480			
UN/ID no.	1993			
Document Number	10000012694			
Synonym	None			
Recommended use of the chemica	l and restrictions on use			
Recommended Use	Laboratory reagent			
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)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 4

Hazards not otherwise classified (HNOC)

Not applicable

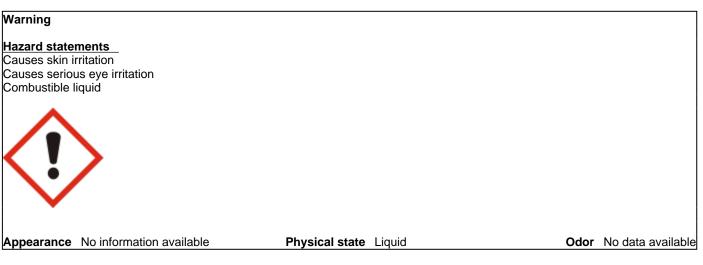
Label elements





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Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Keep away from flames and hot surfaces. - No smoking Wear protective gloves/eye protection/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse 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

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

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 100 % 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)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)





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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
dimethyl sulfoxide	67-68-5	>99*

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

4. FIRST AID MEASURES				
Description of first aid measures				
General advice	Show this safety data sheet to the doctor in attendance.			
Inhalation	Get medical attention immediately if symptoms occur. Remove to fresh air.			
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.			
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.			
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.			
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. Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).			
Most important symptoms and effects, both acute and delayed				
Symptoms	Burning sensation.			
Indication of any immediate medical attention and special treatment needed				
Note to physicians	Treat symptomatically.			
5. FIRE-FIGHTING MEASURES				
Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.			

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.





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Specific hazards arising from the chemical	Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray.			
Explosion data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. Yes.			
Special protective equipment for fire-fightersFirefighters should wear self-contained breathing apparatus and full firefighting turn gear. Use personal protection equipment.				
6. ACCIDENTAL RELEASE MEASURES				
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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

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. Take





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off contaminated clothing and wash before reuse. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions

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. Store in accordance with information listed on the Product Information Sheet (PIS).

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

Engineering controls	Showers
	Eyewash stations
	Ventilation systems.

Individual protection measures, such as personal protective equipment Tight sealing safety goggles. Eye/face protection Hand protection Impervious gloves. Wear suitable gloves. Long sleeved clothing. Wear suitable protective clothing. Skin and body protection No protective equipment is needed under normal use conditions. If exposure limits are **Respiratory protection** exceeded or irritation is experienced, ventilation and evacuation may be required. General hygiene considerations 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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.





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9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Information on basic physical an</u> Physical state	Liquid			
Appearance	No information available			
Color	No information available			
Odor	No data available			
Odor threshold	No data 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		
Kinematic viscosity	No data available	None known		
Dynamic viscosity	No data available	None known		
Explosive properties	No data available			
Oxidizing properties	No information available			
Other Information				
Softening point	No information available			
Molecular weight	No information available			
Molecular formula	No information available			
VOC Content (%)	No information available			
Liquid Density	No information available			
Bulk density	No information available			
	10. STABILITY AND	REACTIVITY		
Reactivity	No information available.			

Chemical stability

Stable under recommended transport or storage conditions.





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Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Strong acids. Strong oxidizing agents.

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 mixture is not available. May cause irritation of respiratory tract.
Eye contact	Irritating to eyes. Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components).
Skin contact	Causes skin irritation. (based on components). Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Symptoms related to the physical, o	chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

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

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

 100 % 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)

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Product Information

Component Information





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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50		
dimethyl sulfoxide	= 28300 mg/kg (Rat)	= 40000 mg/kg (Rat)	> 5.33 mg/L (Rat)4 h		
67-68-5					
Delayed and immediate effects	as well as chronic effects fror	n short and long-term exposure	9		
Skin corrosion/irritation	Classification based on da	ata available for ingredients. Irritat	ing to skin.		
Product Information					
Serious eye damage/eye irritat	ion Classification based on da	ata available for ingredients. Irritat	ing to eyes.		
Product Information					
Respiratory or skin sensitization	n No information available.				
Product Information					
	No information available.				
Germ cell mutagenicity Product Information	no mormation available.				
Product Information					
Caroinagonioity	Carcinogenicity No information available.				
Carcinogenicity	NO INIONNALION AVAILABLE.				
Reproductive toxicity	No information available.				
		Product Information			
	. 1000001				
STOT - single exposure No information available.					
Product Information					
STOT - repeated exposure	STOT - repeated exposure No information available.				
		nformation			
Aspiration hazard	No information available.	No information available.			
·					

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product Information				
Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
dimethyl sulfoxide 67-68-5	-	LC50: =34000mg/L (96h, Pimephales promelas) LC50: 33 - 37g/L (96h, Oncorhynchus mykiss) LC50: >40g/L (96h, Lepomis macrochirus) LC50: =41.7g/L (96h, Cyprinus carpio)	2	-





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Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient
dimethyl sulfoxide	-1.35
67-68-5	

Other adverse effects

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

<u>DOT</u> UN/ID no. Proper shipping name Hazard class Packing Group	1993 Combustible liquid, n.o.s. (Dimethyl sulfoxide) None III
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR	Not regulated





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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

SARA 313

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	Yes
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

Chemical name	New Jersey	Massachusetts	Pennsylvania
dimethyl sulfoxide	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 17-Sep-2024

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