

300-0303 300-0326 300-0337 300-0348 - Stop Solution

Revision Date 28-Feb-2024 Revision Number 1.1

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

**Product identifier** 

Product Name Stop Solution

Other means of identification

**Catalog Number** 300-0303 300-0326 300-0337 300-0348

Document Number 10000010657

Synonym None

Recommended use of the chemical 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)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1A

#### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements



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#### Danger

#### Hazard statements

Harmful if inhaled

Causes severe skin burns and eye damage

May cause cancer



Appearance Clear

Physical state Liquid

Odor No data available

#### **Precautionary Statements - Prevention**

Obtain special instructions before use

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

Use only outdoors or in a well-ventilated area

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

#### Precautionary statements - Response

Immediately call a POISON CENTER or doctor

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor

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

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

#### **Precautionary Statements - Storage**

Store locked up

### **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)



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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)

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Substance**

Not applicable.

#### <u>Mixture</u>

Chemical name	CAS No.	Weight-%
Sulfuric Acid	7664-93-9	19.616

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

#### Description of first aid measures

General advice Immediate medical attention is required. IF exposed or concerned: Get medical

advice/attention. Show this safety data sheet to the doctor in attendance.

**Inhalation** 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. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention. Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately.

Eye contact Get immediate medical advice/attention. 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.

**Skin contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.

Ingestion Get immediate medical advice/attention. Do NOT induce vomiting. Clean mouth with water

and drink afterwards plenty of water. Never give anything by mouth to an unconscious

person.

Self-protection of the first aider

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid

contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as



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required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

surrounding environment.

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

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapors.

**Explosion data** 

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from

and upwind of spill/leak. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Avoid breathing vapors or mists. Use personal protective equipment as required.

Other Information Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions** 

Environmental precautions Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent

product from entering drains. Prevent further leakage or spillage if safe to do so.



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Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** 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 Handle product only in closed system or provide appropriate exhaust ventilation. Take off

contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. In case of insufficient ventilation, wear suitable respiratory equipment. Do

not eat, drink or smoke when using this product.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Protect from moisture. Store away from other materials. Keep out of the reach of children.

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

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

### **Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric Acid	TWA: 0.2 mg/m³ thoracic	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup>
7664-93-9	particulate matter	(vacated) TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>

#### **Appropriate engineering controls**

Engineering controls Showers

Eyewash stations Ventilation systems.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Face protection shield.



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**Hand protection** Impervious gloves. Wear suitable gloves.

Skin and body protection Long sleeved clothing. Chemical resistant apron. Wear suitable protective clothing.

**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** Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid Appearance Clear

ColorNo information availableOdorNo data availableOdor thresholdNo data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

No data available Hq Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known **Evaporation rate** None known No data available Flammability (solid, gas) No data available None known Flammability Limit in Air None known

Upper flammability limit:No data availableLower flammability limit:No data available

Vapor pressure No data available None known Vapor density No data available None known No data available Relative density None known No data available None known Water solubility No data available Solubility in other solvents None known **Partition coefficient** No data available None known No data available None known Autoignition temperature None known **Decomposition temperature** No data available No data available Kinematic viscosity None known **Dynamic viscosity** No data available None known

Explosive properties No data available

Oxidizing properties No information available



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Other Information

Softening point
Molecular weight
Molecular formula
VOC Content (%)
Liquid Density
No information available

### 10. STABILITY AND REACTIVITY

**Reactivity** No information available.

Chemical stability Stable under recommended transport or storage conditions.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid** Exposure to air or moisture over prolonged periods. Excessive heat.

**Incompatible materials** Acids. Strong bases. Oxidizing agents.

Hazardous decomposition products None known based on information supplied.

#### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

#### **Product Information**

**Inhalation** Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking,

headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Specific test data for the substance or mixture is not

available. Harmful by inhalation. (based on components).

Eye contact Causes burns. (based on components). Corrosive to the eyes and may cause severe

damage including blindness. Specific test data for the substance or mixture is not available.

Causes serious eye damage. May cause irreversible damage to eyes.

**Skin contact** Specific test data for the substance or mixture is not available. May cause irritation.

**Ingestion** Causes burns. (based on components). Ingestion causes burns of the upper digestive and

respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters

airways. Specific test data for the substance or mixture is not available.



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Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Numerical measures of toxicity

**Acute toxicity** 

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

ATEmix (oral) 10,909.50 mg/kg
ATEmix (inhalation-dust/mist) 1.300 mg/l

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)

**Product Information** 

**Component Information** 

	Component information				
Chemical name		Oral LD50	Dermal LD50	Inhalation LC50	
	Sulfuric Acid	= 2140 mg/kg (Rat)	-	= 510 mg/m <sup>3</sup> (Rat) 2 h	
	7664-93-9				

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

**Skin corrosion/irritation** May cause skin irritation.

Product Information

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Risk of serious

damage to eyes.

Product Information

**Respiratory or skin sensitization** No information available.

Product Information

Germ cell mutagenicity No information available.

Product Information

**Carcinogenicity** Classification based on data available for ingredients.

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

	<u> </u>	, ,		
Chemical name	ACGIH	IARC	NTP	OSHA
Sulfuric Acid	A2	Group 1	Known	X
7664-93-9				



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**Reproductive toxicity** No information available.

Product Information

**STOT - single exposure** No information available.

**Product Information** 

**STOT - repeated exposure**No information available.

Product Information

**Target organ effects** Respiratory system, Eyes, Skin, Teeth.

**Aspiration hazard** No information available.

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** 

Product Information				
Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sulfuric Acid	-	LC50: >500mg/L (96h,	-	EC50: =29mg/L (24h,
7664-93-9		Brachydanio rerio)		Daphnia magna)

Persistence and degradability No information available.

**Bioaccumulation** There is no data for this product.

Other adverse effects No information available.

# 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

products

Waste from residues/unused

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as

a hazardous waste.



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Chemical name	California Hazardous Waste Status
Sulfuric Acid	Toxic
7664-93-9	Corrosive

### 14. TRANSPORT INFORMATION

DOT Not regulated TDG Not regulated MEX Not regulated ICAO (air) Not regulated IATA Not regulated Not regulated **IMDG** RID Not regulated Not regulated <u>ADR</u> ADN Not regulated

### 15. REGULATORY INFORMATION

**International Inventories** 

Complies **TSCA DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS** Does not comply **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



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#### **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 Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric Acid 7664-93-9	1000 lb	-	-	Х

## **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).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sulfuric Acid	1000 lb	1000 lb
7664-93-9		

#### **US State Regulations**

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Sulfuric Acid - 7664-93-9	Carcinogen

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

Chemical name	New Jersey	Massachusetts	Pennsylvania
Water 7732-18-5	-	-	X
Sulfuric Acid 7664-93-9	Х	X	X



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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 28-Feb-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**