



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

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

Product identifier

Product Name EasySep™ Red Blood Cell Lysis Buffer

Other means of identification

Catalog Number 20110 20120

Document Number DX21064

Synonyms 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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Clear

Physical state Liquid

Odor No data available

Other Information

Not applicable

Unknown acute toxicity 2.38 % of the mixture consists of ingredient(s) of unknown toxicity

- 2.38 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 2.38 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 2.38 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 2.38 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 2.38 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Chemical name	CAS No.	Weight-%
Glycerol	56-81-5	*20 - 50
Ammonium Chloride	12125-02-9	*1 - 10

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

4. FIRST AID MEASURES

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

Skin contact Wash skin with soap and water.
Ingestion Clean mouth with water and drink afterwards plenty of water.

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.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Specific hazards arising from the chemical No information available.

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 Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

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



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

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 in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions 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
Glycerol 56-81-5	No data available	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	-
Ammonium Chloride 12125-02-9	STEL: 20 mg/m ³ fume TWA: 10 mg/m ³ fume	(vacated) TWA: 10 mg/m ³ fume (vacated) STEL: 20 mg/m ³ fume	TWA: 10 mg/m ³ fume STEL: 20 mg/m ³ fume

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021
Revision Number 4

Skin and body protection	No special protective equipment required.
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	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	No information available
Odor	No data available
Odor threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
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	No data available	None known
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



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

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 normal conditions.
Possibility of hazardous reactions None under normal processing.
Conditions to avoid None known based on information supplied.
Incompatible materials None known based on information supplied.
Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.
Eye contact Specific test data for the substance or mixture is not available.
Skin contact 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 No information available.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral) 11,965.50 mg/kg
ATEmix (dermal) 32,032.00 mg/kg

Unknown acute toxicity 2.38 % of the mixture consists of ingredient(s) of unknown toxicity
 2.38 % of the mixture consists of ingredient(s) of unknown acute oral toxicity



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

- 2.38 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 2.38 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 2.38 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 2.38 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Product Information

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol 56-81-5	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h
Ammonium Chloride 12125-02-9	= 1650 mg/kg (Rat)	-	-

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

Skin corrosion/irritation No information available.

Product Information

Serious eye damage/eye irritation No information available.

Product Information

Respiratory or skin sensitization No information available.

Product Information

Germ cell mutagenicity No information available.

Product Information

Carcinogenicity No information available.

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 kidney, Respiratory system, Eyes, Skin.

Aspiration hazard No information available.

RTECS # Glycerol: MA8050000

12. ECOLOGICAL INFORMATION

Ecotoxicity



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

Product Information				
Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glycerol 56-81-5	EC0 (Scenedesmus quadricauda (Green algae)): > 10,000 mg/L	LC50: >100 mg/L (Exposure time: 96h) Chronic toxicity: >1 mg/L	EC0 (Pseudomonas putida): > 10,000 mg/L (Exposure time: 16 h)	EC50: >500mg/L (24h, Daphnia magna)
Ammonium Chloride 12125-02-9	-	LC50: =725mg/L (24h, Lepomis macrochirus) LC50: =209mg/L (96h, Cyprinus carpio)	-	LC50: =202mg/L (24h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Glycerol 56-81-5	log Pow: -2.66

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

DOT Not regulated

TDG Not regulated

MEX Not regulated



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
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	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

Revision Date 12-Aug-2021

Revision Number 4

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
Ammonium Chloride 12125-02-9	5000 lb	-	-	X

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
Ammonium Chloride 12125-02-9	5000 lb	-

US State Regulations

California Proposition 65

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
Water 7732-18-5	-	-	X
Glycerol 56-81-5	X	X	X
Ammonium Chloride 12125-02-9	X	X	X

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 12-Aug-2021
Revision Note No information available.
Disclaimer



SAFETY DATA SHEET

20110 20120 - EasySep™ Red Blood Cell Lysis Buffer

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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