

Safety Data Sheet

EASYSEP™ RBC LYSIS BUFFER 10X CONCENTRATE

EFFECTIVE DATE: 2014-08-12

1 Product and Company Identification

- 1.1 Product Name:** EasySep™ RBC Lysis Buffer 10X Concentrate
- 1.2 Catalog Number:** 20110, 20120
- 1.3 Synonyms:** Not Available
- 1.4 Product Use:** Cell Separation
- 1.5 Manufacturer/Supplier:** STEMCELL Technologies Inc.
Suite 400, 570 West 7th Avenue
Vancouver, BC V5Z 1B3
Canada
- 1.6 In Case of Emergency Call:** +1 604 877 0713

2 Hazards Identification

2.1 Classification of the substance or mixture

Not classified

2.2 Label elements

Pictogram None

Signal word None

Hazard statement(s) None

Precautionary statement(s) None

2.3 Other hazards

None

3 Composition / Information on Ingredients

Hazardous Components (Chemical Name)	Product Identifier	Concentration	GHS Classification
Ammonium chloride	CAS #: 12125-02-9 EC #: 235-186-4	>1.0%	Acute toxicity 4 (Oral), H302 Eye irritation 2A, H319

4 First Aid Measures

4.1 Description of first aid measures

4.1.1 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

4.1.2 In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

4.1.3 In case of eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

4.1.4 If swallowed

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Safety Data Sheet

EASYSEP™ RBC LYSIS BUFFER 10X CONCENTRATE

EFFECTIVE DATE: 2014-08-12

4.2 Most important symptoms and effects, both acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Fire Fighting Instructions

Wear self-contained breathing apparatus for firefighting if necessary.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas. Ensure adequate ventilation
For personal protection see section 8.

6.2 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.

6.3 Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

7 Handling and Storage

7.1 Precautions for safe handling

Provide good ventilation in process area to prevent formation of vapour.

7.2 Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8 Exposure Controls/Personal Protection

8.1 Exposure limits

Component	CAS #	Control parameters	Value
Ammonium chloride	12125-02-9	ACGIH TWA (mg/m ³)	10 mg/m ³
		ACGIH STEL (mg/m ³)	20 mg/m ³

Safety Data Sheet

EASYSEP™ RBC LYSIS BUFFER 10X CONCENTRATE

EFFECTIVE DATE: 2014-08-12

8.2 Engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use mechanical exhaust or laboratory fumehood to avoid exposure.

8.3 Personal protective equipment

8.3.1 Eye/face protection

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

8.3.2 Skin 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.

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.3.3 Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.3.4 General hygiene considerations

General industrial hygiene practice.

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Colourless liquid
Odour	No data available
Odour threshold	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Decomposition temperature	No data available
Relative density	No data available
Solubility in water	No data available
Solubility in other liquids	No data available
pH	7.2 - 7.4
Partition coefficient: n-octanol/water	No data available
Viscosity	No data available
Vapour pressure	No data available
Vapour density	No data available
Evaporation rate	No data available
Flash point	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Auto-ignition temperature	No data available

Safety Data Sheet

EASYSEP™ RBC LYSIS BUFFER 10X CONCENTRATE

EFFECTIVE DATE: 2014-08-12

9.2 Other information

No data available

10 Stability and Reactivity

- | | |
|--|--|
| 10.1 Reactivity | No data available |
| 10.2 Chemical stability | Stable under normal conditions. |
| 10.3 Possibility of hazardous reactions | No data available |
| 10.4 Conditions to avoid | Direct sunlight. Extremely high or low temperatures. |
| 10.5 Incompatible materials | Strong acids |
| 10.6 Hazardous decomposition products | Gaseous ammonia, carbon monoxide, carbon dioxide |

11 Toxicological Information

11.1 Acute toxicity

No data available

Ammonium chloride (CAS #12125-02-9)	
LD50 oral rat	1360 mg/kg (Rat)

11.2 Skin corrosion/irritation

No data available

11.3 Serious eye damage/eye irritation

No data available

11.4 Aspiration hazard

No data available

11.5 Specific target organ toxicity - single exposure

No data available

11.6 Specific target organ toxicity - repeated exposure

No data available

11.7 Respiratory and/or skin sensitization

No data available

11.8 Carcinogenicity

No data available

11.9 Reproductive toxicity

No data available

11.10 Germ cell mutagenicity

No data available

11.11 Signs and symptoms of exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.12 RTECS

No data available

Safety Data Sheet

EASYSEP™ RBC LYSIS BUFFER 10X CONCENTRATE

EFFECTIVE DATE: 2014-08-12

12 Ecological Information

12.1 Toxicity

Ammonium chloride (CAS #12125-02-9)	
LC50 fishes 1	209 mg/L (96 h; Cyprinus carpio; Ammonia)
EC50 Daphnia 1	161 mg/L (48 h; Daphnia magna; Static system)
LC50 fish 2	1.51 - 2.1 mg/L (96 h; Pimephales promelas; Ammonia)
EC50 Daphnia 2	50 mg/L (96 h; Daphnia magna; Static system)
TLM fish 1	6 mg/L (96 h; Lepomis macrochirus)
Threshold limit algae 1	5 ppm (672 h; Potamogeton sp.; O2 evolution)
Threshold limit algae 2	< 70 mg/L (240 h; Algae; Nitrogen)

12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Other adverse effects	Avoid release to the environment.

13 Disposal Considerations

13.1 Waste disposal method	Dispose in accordance with local, provincial/state, and federal regulations.
----------------------------	--

14 Transport Information

14.1 UN number	No data available
14.2 UN proper shipping name	DOT Not dangerous goods ADR/RID Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods
14.3 Transport hazard class(es)	No data available
14.4 Packing group	No data available
14.5 Environmental hazards	No data available
14.6 Special precautions	No data available

15 Regulatory Information

15.1 WHMIS Classification

Not WHMIS controlled

Ammonium chloride (CAS #12125-02-9)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Safety Data Sheet

EASYSEP™ RBC LYSIS BUFFER 10X CONCENTRATE

EFFECTIVE DATE: 2014-08-12

15.2 Regulatory information statement

This SDS was prepared according to the Canadian Controlled Products Regulation and contains all the information required by those regulations.

This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

16 Other Information

16.1 Prepared by: Quality Control, STEMCELL Technologies Inc.

16.2 Revision: N/A

16.3 Notice: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.

16.4 Disclaimer: **THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.**