

## Safety Data Sheet

**AMMONIUM CHLORIDE SOLUTION****EFFECTIVE DATE: 2016-03-14**

### 1 Product and Company Identification

- 1.1 Product Name:** Ammonium Chloride Solution
- 1.2 Catalog Number:** 07800, 07850
- 1.3 Product Use:** Cell Culture
- 1.4 Manufacturer/Supplier:** STEMCELL Technologies  
Suite 500-1618 Station Street  
Vancouver, British Columbia V6A 1B6 Canada
- 1.5 In Case of Emergency Call:** 1-800-667-0322

### 2 Hazards Identification

- 2.1 Classification of the substance or mixture**  
Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).
- 2.2 Label elements**  
Not a hazardous substance or mixture.
- 2.3 Other hazards** No data available

### 3 Composition / Information on Ingredients

#### 3.1 Substances

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
Ammonium chloride	12125-02-9	0.8%	235-186-4

### 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**  
Wash off with soap and plenty of water.
- 4.1.3 In case of eye contact**  
Flush eyes with water as a precaution.
- 4.1.4 If swallowed**  
Never give anything by mouth to an unconscious person. Rinse mouth with water.
- 4.2 Most important symptoms and effects, both acute and delayed**  
The most important known symptoms and effects are described in section 2.2 and/or in section 11.
- 4.3 Indication of any immediate medical attention and special treatment needed**  
No data available

## Safety Data Sheet

**AMMONIUM CHLORIDE SOLUTION****EFFECTIVE DATE: 2016-03-14**

### 5 Fire Fighting Measures

#### 5.1 Extinguishing Media

##### 5.1.1 Suitable Extinguishing Media

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

##### 5.1.2 Unsuitable Extinguishing Media

No data available

#### 5.2 Special hazards arising from the substance or mixture

##### 5.2.1 Flammable Properties and Hazards

No data available

##### 5.2.2 Flash Pt

No data available

##### 5.2.3 Autoignition Pt

No data available

##### 5.2.4 Explosive Limits

LEL: No data available

UEL: No data available

##### 5.2.5 Hazardous Combustion Products

No data available

#### 5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

---

### 6 Accidental Release Measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas.

For personal protection see section 8.

#### 6.2 Environmental precautions

No special environmental precautions required.

#### 6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

---

### 7 Handling and Storage

#### 7.1 Precautions for safe handling

For precautions see section 2.2.

#### 7.2 Conditions for safe storage

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

---

## Safety Data Sheet

**AMMONIUM CHLORIDE SOLUTION****EFFECTIVE DATE: 2016-03-14**

### 8 Exposure Controls/Personal Protection

#### 8.1 Exposure limits

Contains no substances with occupational exposure limit values.

#### 8.2 Engineering controls

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.

##### 8.3.5 Environmental exposure controls

No data available

---

### 9 Physical and Chemical Properties

#### 9.1 Information on basic physical and chemical properties

Appearance	Clear liquid
Odour	No data available
Odour threshold	No data available
pH	7.2 - 7.5
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	No data available

## Safety Data Sheet

**AMMONIUM CHLORIDE SOLUTION**
**EFFECTIVE DATE: 2016-03-14**

Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

### 10 Stability and Reactivity

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical stability</b>	No data available
<b>10.3 Possibility of hazardous reactions</b>	No data available
<b>10.4 Conditions to avoid</b>	No data available
<b>10.5 Incompatible materials</b>	No data available
<b>10.6 Hazardous decomposition products</b>	No data available

### 11 Toxicological Information

#### 11.1 Acute toxicity

Oral:	Ammonium chloride: LD50 Oral - Rat - 1,650 mg/kg
Inhalation:	No data available
Dermal:	No data available
Other:	No data available

#### 11.2 Skin corrosion/irritation

Ammonium chloride: Skin - Rabbit - No skin irritation

#### 11.3 Serious eye damage/eye irritation

Ammonium chloride: Eyes - Rabbit - Eye irritation

#### 11.4 Respiratory and/or skin sensitization

Ammonium chloride: Will not occur

#### 11.5 Germ cell mutagenicity

No data available

#### 11.6 Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### 11.7 Reproductive toxicity

No data available

#### 11.8 Specific target organ toxicity - single exposure

No data available

#### 11.9 Specific target organ toxicity - repeated exposure

## Safety Data Sheet

**AMMONIUM CHLORIDE SOLUTION**
**EFFECTIVE DATE: 2016-03-14**

No data available

**11.10 Aspiration hazard**

No data available

**11.11 Potential health effects**

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

**11.12 Signs and symptoms of exposure**

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

**11.13 RTECS #** Ammonium chloride: BP4550000

**12 Ecological Information**
**12.1 Toxicity** No data available

**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** No data available

**13 Disposal Considerations**
**13.1 Waste disposal method**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**13.2 Contaminated packaging**

Dispose of as unused product.

**14 Transport Information**
**14.1 UN number** No data available

<b>14.2 UN proper shipping name</b>	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

**Safety Data Sheet****AMMONIUM CHLORIDE SOLUTION****EFFECTIVE DATE: 2016-03-14****15 Regulatory Information****15.1 USA****SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312:**

Ammonium chloride: Acute Health Hazard

**Massachusetts Right To Know Components**

Component	CAS #	Revision Date
Ammonium chloride	12125-02-9	1994-04-01

**Pennsylvania Right To Know Components**

Component	CAS #	Revision Date
Ammonium chloride	12125-02-9	1994-04-01

**New Jersey Right To Know Components**

Component	CAS #	Revision Date
Ammonium chloride	12125-02-9	1994-04-01

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**15.2 EU**

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

**15.3 Canada**

Not WHMIS controlled

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

**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.**