



**Safety Data Sheet (SDS)** According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2018-09-10

Version: 1

## SECTION 1. Identification

### Product identifier

**Product No** 78450  
**Product name** Ammonium Bicarbonate, 1M in HPLC-Grade Water

### Recommended use of the chemical and restrictions on use

**Identified uses** This product is intended for research purposes only.

### Manufacturer, importer, supplier

**Manufacturer address** Cell Signaling Technology, Inc.  
3 Trask Lane  
Danvers, MA 01923  
United States  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400

**Website** www.cellsignal.com  
**Email address** support@cellsignal.com  
**Emergency telephone number** In case of emergency call CHEMTREC 1-800-424-9300

## SECTION 2. Hazard(s) identification

### Classification

This substance/mixture is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### GHS Label elements, including precautionary statements

#### **Signal Word**

None.

#### **Hazard statement(s)**

None.

#### **Precautionary Statement(s)**

None.

### Supplementary Hazard Information

No information available.

#### **Hazards not otherwise classified (HNOC)**

Not applicable.

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown acute toxicity

**SECTION 3. Composition/information on ingredients**

**Formula** NH<sub>4</sub>HCO<sub>3</sub>  
**Molecular Weight** 79.06 g/mol

Chemical Name	CAS No	Weight %
Carbonic acid, monoammonium salt	1066-33-7	5

**SECTION 4. First-aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.  
**Skin contact** Wash skin with soap and water.  
**Inhalation** Move to fresh air.  
**Ingestion** Clean mouth with water and afterwards drink plenty of water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

No information available.

**Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**Advice for emergency responders**

**General advice** For further assistance, contact your local Poison Control Center.  
**Protection of first-aiders** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**SECTION 5. Fire-fighting measures****Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
**Unsuitable Extinguishing Media** None.

**Specific hazards arising from the chemical**

No information available.

**Explosion Data**

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

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**SECTION 6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

<b>For non-emergency personnel</b>	Avoid contact with skin, eyes and inhalation of vapors.
<b>Other information</b>	No information available.

**Environmental precautions**

See Section 12 for additional information.

**Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material. Clean contaminated surface thoroughly.

**SECTION 7. Handling and storage****Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice.

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

<b>Technical measures/Storage conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Packaging material</b>	No information available.
<b>Incompatible products</b>	None known based on information supplied.

**SECTION 8. Exposure controls/personal protection****Control parameters****Appropriate engineering controls**

Showers, eyewash stations, and ventilation systems.

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

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

<b>Eye/face protection</b>	Safety glasses with side-shields
<b>Skin and body protection</b>	Wear protective gloves/clothing.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.

**SECTION 9. Physical and chemical properties****Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Color</b>	Colorless
<b>Appearance</b>	Clear	<b>Odor Threshold</b>	No information available
<b>Odor</b>	No information available		

Property	Values	Remarks	Method
pH	No information available		
Melting point/freezing point			
Initial boiling point and boiling range			
Flash point		-	

<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Upper flammability limit</b>	No information available
<b>Lower flammability limit</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	No information available
<b>Solubility</b>	No information available.
<b>Solubility in other solvents</b>	No information available.
<b>Partition coefficient: n-octanol/water</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other information**

<b>Softening point</b>	No information available
<b>Molecular Weight</b>	79.06
<b>VOC content</b>	No information available
<b>Density</b>	No information available.
<b>Bulk Density VALUE</b>	No information available.

## SECTION 10. Stability and reactivity

**Reactivity**

No information available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

<b>Hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	None under normal processing.

**Conditions to Avoid**

Heat.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## SECTION 11. Toxicological information

**Information on likely routes of exposure**

<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Eye contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	Avoid contact with skin.
<b>Ingestion</b>	May be harmful if swallowed.

**Information on toxicological effects**

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of

potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Carbonic acid, monoammonium salt	= 1576 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown acute toxicity.

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

<b>Symptoms</b>	No information available.
<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenicity</b>	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Neurological effects</b>	No information available.
<b>Aspiration Hazard</b>	No information available.

### SECTION 12. Ecological information

#### Ecotoxicity

0% of the mixture consists of components of unknown hazards to the aquatic environment.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Carbonic acid, monoammonium salt	-	LC50 0.615 - 0.712 mg/L (Oncorhynchus mykiss) 96 h LC50 0.16 - 1.1 mg/L (Oncorhynchus mykiss) 96 h	-

<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulation</b>	Not likely to bioaccumulate.
<b>Mobility</b>	No information available

Chemical Name	Octanol-Water Partition Coefficient
Carbonic acid, monoammonium salt	-2.4

#### Other adverse effects

No information available.

### SECTION 13. Disposal considerations

#### Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

#### Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way.

### SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

**SECTION 15. Regulatory information****North American Inventory Listing**

Chemical Name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
Carbonic acid, monoammonium salt	Listed	Not Listed	Listed	Not Listed

**Canadian Workplace Hazardous Materials Information System (WHMIS) Classification**

This product does not meet the criteria for classification under the Hazardous Products Act.

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS No	SARA 313 - Threshold Values %
Carbonic acid, monoammonium salt	1066-33-7	1.0

**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

**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	CWA - Bioaccumulative Chemicals of Concern (BCCs)
Carbonic acid, monoammonium salt	5000 lb	Not Listed	Not Listed	Listed	Not Listed

**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
Carbonic acid, monoammonium salt	5000 lb	Not Listed

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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

This product contains the following U.S. State Right to Know chemicals:

Chemical Name	New Jersey	Massachusetts	Pennsylvania

Carbonic acid, monoammonium salt	Listed	Listed	Listed
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**U.S. FIFRA Label Information**

This product does not contain any substances regulated as pesticides.

**US Commerce Department - Export Administration Regulations Information**

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

**U.S. Drug Enforcement Administration Information**

This product does not contain any substances regulated under the DEA.

**SECTION 16. Other information**

**Issuing Date:** 2018-09-10

**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.

End of Safety Data Sheet