

# Safety Data Sheet

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### Identification of the substance or mixture

**Product code** 1856006  
**Product name** Assay Reagent

### Company/undertaking identification

Life Technologies Corporation  
5781 Van Allen Way  
PO Box 6482  
Carlsbad, CA 92008  
+1 760 603 7200

Life Technologies  
5250 Mainway Drive  
Burlington, ONT  
CANADA L7L 6A4  
800/263-6236

Thermo Fisher Scientific  
Pierce Biotechnology  
P.O. Box 117  
Rockford, IL 61105  
United States  
1.815.968.0747 or  
1.800.874.3723

**24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call CHEMTREC** Within the USA + Canada: 1-800-424-9300 and +1 703-527-3887  
Outside the USA + Canada: +1 703-741-5970

**Country Specific Emergency Number (if available):**

**Use as laboratory reagent**  
**Scientific research and development**

## SECTION 2: Hazards identification

### GHS - Classification

**Signal Word**  
WARNING

**Hazard pictograms**

**Health hazards**

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

**Physical hazards**

Not classified

**Environmental hazards**

Not classified

**Hazard Statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

**Precautionary Statements****Prevention**

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash hands thoroughly after handling

**Response**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P362 + P364 - Take off all contaminated clothing and wash it before reuse

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337 + P313 - If eye irritation persists: Get medical advice/attention

**Storage**

Not Applicable

**Disposal**

Not Applicable

**Other hazards**

Not Applicable

**HMIS**

Health	2
Flammability	0
Reactivity	0

## SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Cupric sulfate 5H <sub>2</sub> O 7758-99-8 (<0.1)	7758-99-8	-	<0.1
Sodium carbonate 497-19-8 (1-5)	497-19-8	207-838-8	1-5

We recommend handling all chemicals with caution.

## SECTION 4: First aid measures

## Description of first aid measures

<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Notes to Physician</b>	Treat symptomatically.

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

H315 - Causes skin irritation H319 - Causes serious eye irritation

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

None.

## SECTION 5: Firefighting measures

**Extinguishing media**

**Suitable extinguishing media**  
**Unsuitable extinguishing media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical.  
No information available.

**Special hazards arising from the substance or mixture**

Not known

**Advice for fire-fighters**

Wear self-contained breathing apparatus and protective suit

## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation  
Avoid contact with skin, eyes or clothing  
Use personal protection equipment  
See Section 8 for more detail.

### Environmental precautions

No special environmental precautions required.

### Methods and material for containment and cleaning up

Soak up with inert absorbent material.

### Reference to other sections

See section 8 for more information.

## SECTION 7: Handling and storage

### Precautions for safe handling

Always wear recommended Personal Protective Equipment. See Section 8 for more detail. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

### Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

### Specific end use(s)

Use as laboratory reagent. Scientific research and development.

## SECTION 8: Exposure controls/personal protection

### Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Cupric sulfate 5H <sub>2</sub> O	None	None	1 mg/m <sup>3</sup>	None
Sodium carbonate	None	None	None	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Cupric sulfate 5H <sub>2</sub> O	None	None	None
Sodium carbonate	None	None	None

**Engineering measures**      Ensure adequate ventilation, especially in confined areas.

### Exposure controls

#### Personal Protective Equipment

**Respiratory protection**      In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

**Hand protection**      Glove material: Nitrile rubber. with thickness (mm): .5. Break through time. (hours): .1.

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Recommended glove type has not been tested for use with product. Information is based on professional Knowledge.

- Eye protection** Tight sealing safety goggles.
- Skin and Body Protection** Wear laboratory coat for body protection.
- Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice
- Environmental exposure controls**  
No special environmental precautions required.

**SECTION 9: Physical and chemical properties**

**Information on basic physical and chemical properties**

<b>Appearance</b>	liquid	
<b>Color</b>	light blue	
<b>Odor</b>	Mixture has not been tested	
<b>Odor Threshold</b>	Mixture has not been tested	
<b>pH</b>	13	
<b>Melting point / melting range</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Boiling point / boiling range</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Flash point</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Autoignition Temperature</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Decomposition temperature</b>	°C Mixture has not been tested	°F Mixture has not been tested
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	Not Applicable	
<b>Upper explosion limit</b>	Mixture has not been tested	
<b>Lower explosion limit</b>	Mixture has not been tested	
<b>Vapor Pressure</b>	Mixture has not been tested	
<b>Relative density</b>	Mixture has not been tested	
<b>Specific gravity</b>	No data available	
<b>Solubility</b>	Mixture has not been tested	
<b>Partition coefficient: n-octanol/water</b>	No data available	
<b>Viscosity</b>	Mixture has not been tested	
<b>Explosive properties</b>	Mixture has not been tested	
<b>Oxidizing properties</b>	Mixture has not been tested	

**Other information**  
No data available.

## SECTION 10: Stability and reactivity

<b>Reactivity</b>	None known.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous reaction has not been reported.
<b>Conditions to avoid</b>	No information available.
<b>Incompatible materials</b>	No dangerous reaction known under conditions of normal use.
<b>Hazardous decomposition products</b>	No known hazardous decomposition products.

## SECTION 11: Toxicological information

### Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Cupric sulfate 5H <sub>2</sub> O	= 960 mg/kg (Rat) = 300 mg/kg (Rat)	No data available	No data available
Sodium carbonate	= 4090 mg/kg (Rat)	No data available	No data available

### Principal Routes of Exposure

<b>Irritation</b>	Skin irritation Irritating to eyes
<b>Corrosivity</b>	Conclusive but not sufficient for classification
<b>Sensitization</b>	Conclusive but not sufficient for classification
<b>STOT - Single Exposure</b>	Conclusive but not sufficient for classification
<b>STOT - Repeated Exposure</b>	Conclusive but not sufficient for classification
<b>Carcinogenicity</b>	Conclusive but not sufficient for classification
<b>Mutagenicity</b>	Conclusive but not sufficient for classification
<b>Reproductive toxicity</b>	Conclusive but not sufficient for classification
<b>Aspiration hazard</b>	Conclusive but not sufficient for classification

## SECTION 12: Ecological information

### Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Cupric sulfate 5H2O	No data available	Daphnia magna EC500.0058 - 0.0073 mg/L (48 h) Daphnia magna EC500.147 - 0.227 mg/L (48 h)	No data available	No data available	No data available
Sodium carbonate	Nitzschia EC50=242 mg/L (120 h)	Daphnia magna EC50=265 mg/L (48 h)	No data available	No data available	No data available

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other adverse effects** No information available.

## SECTION 13: Disposal considerations

### Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport information

### IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

<b>UN number</b>	Not Applicable
<b>UN proper shipping name</b>	Not Applicable
<b>Transport hazard class(es)</b>	Not Applicable
<b>Packing group</b>	Not Applicable

### Environmental hazards

Not Applicable

### Special precautions for user

Not Applicable

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Applicable.

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## SECTION 15: Regulatory information

Component	US TSCA
Cupric sulfate 5H <sub>2</sub> O 7758-99-8 (<0.1)	-
Sodium carbonate 497-19-8 (1-5)	Listed

**US Federal Regulations****SARA 313**

This product is not regulated by SARA.

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight %</u>	<u>SARA 313 - Threshold Values</u>
Cupric sulfate 5H <sub>2</sub> O	7758-99-8	<0.1	1.0

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain HAPs.

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class**

D2B - Toxic materials



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**National Regulations - Brazil**

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Brazil - National Agency for Sanitary Surveillance (ANVISA)</u>	<u>Brazil - National List of Carcinogen Agents to Humans (LINACH)</u>
Cupric sulfate 5H <sub>2</sub> O	7758-99-8	Not Listed	Not Listed
Sodium carbonate	497-19-8	Not Listed	Not Listed

## SECTION 16: Other information

**Reason for revision** SDS sections updated.  
**Revision number** 4  
**Revision date** 12-Sep-2018

Use as laboratory reagent. Scientific research and development.

**References**

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- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

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**End of Safety Data Sheet**