

1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code AM7020
Product name RNAlater ®

Company/Undertaking Identification

Life Technologies
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Life Technologies
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24 hour Emergency Response:

866-536-0631
301-431-8585
Outside of the U.S. +1-301-431-8585

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification

GHS - Classification

Signal Word
not hazardous

Health Hazard
not hazardous

Physical Hazards
not hazardous

Principle Routes of Exposure/ Potential Health effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.

Specific effects

Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none

Target Organ Effects No known effects under normal use conditions.

HMIS

Health	0
Flammability	0
Reactivity	0

3. Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
AMMONIUM SULFATE	7783-20-2	231-984-1	60 - 100

The product contains no substances which at their given concentration, are considered to be hazardous to health. Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

4. First aid measures

Skin contact	Rinse with plenty of water. If symptoms arise, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage

Handling Always wear recommended Personal Protective Equipment. No special handling advice required.

Storage Keep in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Exposure limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
AMMONIUM SULFATE	none	none	none	none

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Safety glasses with side-shields.

Skin and body protection. Lightweight protective clothing.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains.

9. Physical and chemical properties

General Information

Form	liquid	
Appearance	No information available	
Odor	No information available	
Boiling Point/Range	°C no data available	°F no data available
Melting point/range	°C no data available	°F no data available
Flash point	°C no data available	°F no data available
Autoignition temperature	°C no data available	°F no data available
Oxidizing properties	No information available.	
Water solubility	soluble	
pH Range	5 - 5.2	

10. Stability and reactivity

Stability Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Materials to avoid sodium hypochlorite

Hazardous decomposition products None under normal use

polymerization Hazardous polymerisation does not occur.

11. Toxicological information

Acute toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
AMMONIUM SULFATE	= 2000 mg/kg (Rat)	no data available	no data available

Principle Routes of Exposure/ Potential Health effects

Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects	No known effects under normal use conditions.

12. Ecological information

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	Inherently biodegradable
Bioaccumulation	Does not bioaccumulate.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
AMMONIUM SULFATE 7783-20-2		Daphnia magna LC50=14 mg/L (48 h) Daphnia magna EC50=423 mg/L (24 h)			logPow-5.1

13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information

IATA

Proper shipping name	Not classified as dangerous in the meaning of transport regulations
Hazard class	none
Subsidiary Class	none
Packing group	none
UN-No	None

15. Regulatory information

Component	TSCA
AMMONIUM SULFATE 7783-20-2 (60 - 100)	Listed

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
AMMONIUM SULFATE	7783-20-2	60 - 100	1.0

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

This product does not contains HAPs.

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
AMMONIUM SULFATE	Listed	-	Listed	-	Listed

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision (M)SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

End of Safety Data Sheet