

Safety Data Sheet

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

Identification of the substance or mixture

Product code AM7021
Product name RNALATER 500 ML

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

For research use only. Not for use in diagnostic procedures.

Uses advised against

Not for consumer use.

Company/undertaking identification

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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):

CHEMTREC Israel (Tel Aviv)	+ (972)-37630639 (Greeting Language: Hebrew)
CHEMTREC Malaysia	1-800-815-308 (Toll Free) (Greeting Language: Malay)
CHEMTREC Malaysia (Kuala Lumpur)	+ (60)-327884561 (Greeting Language: Malay)
CHEMTREC Philippines	1-800-1-116-1020 (Toll Free) (Greeting Language: Tagalog)
CHEMTREC Philippines (Manila)	+ (63) 632-395-3308 (Greeting Language: Tagalog)
CHEMTREC Saudi Arabia	+ (966)-8111095861 (Greeting Language: Arabic and English)
CHEMTREC Singapore	800-101-2201 (Toll Free) (Greeting Language: English and Mandarin)
CHEMTREC Singapore	+ (65)-31581349 (Greeting Language: English and Mandarin)
CHEMTREC Australia (Sydney)	+ (61)-290372994 (Greeting Language: English)
CHEMTREC New Zealand (Auckland)	+ (64)-98010034 (Greeting Language: English)
CHEMTREC South Africa	0-800-983-611 (Greeting Language: English)
CHEMTREC Vietnam (Hanoi)	+ (84)-444581771 (welcome Language: Vietnamese)

CHEMTREC South Korea	00-308-13-2549 (free call) (Welcome language: Korean)
CHEMTREC South Korea	+ (82) 070-7686-0086 (Welcome language: Korean)

SECTION 2: Hazards identification

Australian SDS Statement Not classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonised System (GHS)

GHS Classification

Health hazards

Not Hazardous

Physical hazards

Not Hazardous

Environmental hazards

Not Hazardous

Label elements

Signal Word

None

Hazard pictograms

None

Hazard pictograms names

None

Hazard Statements

Not Applicable

Precautionary Statements

Prevention

Not Applicable

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Response
Not Applicable

Storage
Not Applicable

Disposal
Not Applicable

Other hazards
Not Applicable

SECTION 3: Composition/information on ingredients

Component	CAS No	Common name	EINECS-No.	Weight-%
Ammonium sulfate 7783-20-2 (40-70)	7783-20-2	-	231-984-1	40-70

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

Skin contact Rinse skin with water. Immediate medical attention is not required.
Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Notes to Physician Treat symptomatically.

Most important symptoms and effects, both acute and delayed
Not Applicable

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 (CO₂). Foam. Dry chemical.
No information available.

Special hazards arising from the substance or mixture
Not known

Protective equipment and precautions for firefighters
Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
 Always wear recommended Personal Protective Equipment
 Use personal protection equipment
 See section 8 for more information

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

Use personal protective equipment as required. No special handling advices are necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labelled containers.

Specific end use(s)

For research use only. Not for use in diagnostic procedures.

SECTION 8: Exposure controls/personal protection

Control parameters

Contains no substances with occupational exposure limit values.

Chemical Name	Australia STEL	Australia	Australia - Skin Absorbers	Australia - OES - Peak
Ammonium sulfate 7783-20-2	None	None	None	None

Chemical Name	New Zealand - Workplace Exposure Limits	New Zealand TWA	New Zealand STEL	New Zealand Ceiling Limits
Ammonium sulfate 7783-20-2	None	None	None	None

Chemical Name	China OEL (MAC)	China - Skin Absorbers	Hong Kong OEL
Ammonium sulfate 7783-20-2	None	None	None

Chemical Name	Korea OEL (CEILING)	Korea OEL (TWA)	Korea OEL (STEL)
Ammonium sulfate 7783-20-2	None	10 mg/m ³	20 mg/m ³

Chemical Name	Korea OEL (Skin Notations)	Korea PEL (STELs)	Korea PEL (TWAs)
Ammonium sulfate 7783-20-2	None	None	None

Chemical Name	Korea OEL (Carcinogens)	Korea OEL (Germ Cell Mutagenicity)	Korea OEL (Reproductive Toxicity)
Ammonium sulfate 7783-20-2	None	None	None

Chemical Name	Taiwan OEL - TWA	Taiwan OEL (Skin notations, Carcinogens)	Taiwan OEL (STELs)	Taiwan OEL (Ceilings)
Ammonium sulfate 7783-20-2	None	None	None	None

Chemical Name	Singapore OEL (PEL)	Singapore OEL (STEL)
Ammonium sulfate 7783-20-2	None	None

Chemical Name	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Ammonium sulfate 7783-20-2	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 Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Eye protection Tight sealing safety goggles

Skin and Body Protection Wear suitable protective clothing

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

Appearance	liquid	
Odour	No data available	
Odour Threshold	No data	
Molecular Weight	No data	
pH	No data available	
Melting point / melting range	°C No data	°F No data
Boiling point / boiling range	°C No data	°F No data
Flash point	°C No data	°F No data
Autoignition Temperature	°C No data	°F No data
Decomposition temperature	°C No data	°F No data
Evaporation rate	No data	
Flammability (solid, gas)	No data available	
Upper explosion limit	No data	
Lower explosion limit	No data	
Vapour Pressure	No data	
Vapour density	No data	
Relative density	No data	
Specific gravity	No data	
Solubility	No data available	
Partition coefficient: n-octanol/water	No data available	
Viscosity	No data	
Explosive properties	No data	
Oxidising properties	No data	

Other information

No data available.

SECTION 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No data available.

SECTION 11: Toxicological information

Information on toxicological effects

There is no evidence available indicating acute toxicity.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium sulfate	= 2840 mg/kg (Rat)	No data available	No data available

Principal Routes of Exposure

Acute toxicity	Data are conclusive but insufficient for classification.
Skin corrosion/irritation	Data are conclusive but insufficient for classification
Serious eye damage/irritation	Data are conclusive but insufficient for classification
Respiratory or skin sensitisation	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT) – single exposure	Data are conclusive but insufficient for classification
Specific target organ toxicity (STOT) – repeated exposure	Data are conclusive but insufficient for classification
Carcinogenicity	Data are conclusive but insufficient for classification
Germ cell mutagenicity	Data are conclusive but insufficient for classification
Reproductive toxicity	Data are conclusive but insufficient for classification
Aspiration hazard	Data are conclusive but insufficient for classification

SECTION 12: Ecological information

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Ammonium sulfate	No data available	Daphnia magna LC50=14 mg/L (48 h) Daphnia magna EC50=423 mg/L (24 h)	No data available	No data available	logPow-5.1

Mobility in soil No information 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

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

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Transport in bulk according to Annex II of MARPOL and the IBC Code
Not Applicable.

SECTION 15: Regulatory information

International Inventories

Chemical Name	US TSCA	Canada (DSL)	NDSL	PICCS (Philippines)
Ammonium sulfate	Listed	Listed	-	Listed

Chemical Name	ENCS (Japan)	IECSC - China Inventory of Existing Chemical Substances	South Korea (KECL)	AICS (Australia)
Ammonium sulfate	Listed	Listed	Listed	Listed

Chemical Name	NZIoC - New Zealand Inventory of Chemicals	EINECS (European Union)	ELINCS (European List of Notified Chemical Substances)
Ammonium sulfate	Listed	Listed	-

Korea

Occupational Safety and Health Act

Chemical Name	ISHA - Substances to be controlled - Metals	ISHA - Substances to be controlled - Organic Substances	ISHA - Substances to be controlled - Acids and bases	ISHA - Substances to be controlled - Gas-phase substances
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Chemical Name	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	Special management materials
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable

Chemical Name	Harmful agents subject to work environment monitoring - Organic compounds	Harmful agents subject to work environment monitoring - Metals	Harmful agents subject to work environment monitoring - Acids and alkalis	Harmful agents subject to work environment monitoring - Gas-phase substances	Harmful agents subject to work environment monitoring - Dusts
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Chemical Name	Harmful agents subject to workers requiring health examination - Organic compounds	Harmful agents subject to workers requiring health examination - Metals	Harmful agents subject to workers requiring health examination - Acids and alkalis	Harmful agents subject to workers requiring health examination - Gas-phase substances	Harmful agents subject to workers requiring health examination - Dusts
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Chemical Name	Korea OEL (CEILING)	Korea OEL (TWA)	Korea OEL (STEL)	Korea OEL (Skin Notations)
Ammonium sulfate	Not Applicable	Applicable	Applicable	Not Applicable

Chemical Name	Korea OEL (Carcinogens)	Korea OEL (Germ Cell Mutagenicity)	Korea OEL (Reproductive Toxicity)	Korea PEL (STELs)	Korea PEL (TWAs)
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Chemical Name	ISHA - Harmful or Dangerous Substances Subject to Submission of Process Safety	ISHA - Harmful or Dangerous Substances Subject to Submission of Process Safety

	Reports - Storage	Reports - Manufacturing or Handling
Ammonium sulfate	Not Applicable	Not Applicable

Chemicals Control Act

Chemical Name	Toxic substance	Prohibited substance	Restricted substance
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable

Chemical Name	Threshold Values (%)	Quantity limit for manufacture/use	Quantity limit for custody/storage
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable

Chemical Name	Pollutant Release and Transfer Registers (PRTR) - Group I	Pollutant Release and Transfer Registers (PRTR) - Group II
Ammonium sulfate	Not Applicable	Not Applicable

Act on Registration, Evaluation, etc. of Chemicals (K-REACH)

Chemical Name	Ministry of Environment - CMR risk	Ministry of Environment - Critically Controlled Substance	Existing substances subject to registration	Existing substances not likely to be subject to registration	Existing substances known to be of very low risk
Ammonium sulfate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Safety Control of Dangerous Substances Act

Chemical Name	Safety Control of Dangerous Substances Act
Ammonium sulfate	Not Applicable

Wastes Control Act

Chemical Name	Wastes Control Act
Ammonium sulfate	Not Applicable

Singapore

Chemical Name	Singapore - Poisons List
Ammonium sulfate	Not Listed

Taiwan

Chemical Name	Toxic Chemical Substances Control Act - Classification and Control Levels	Toxic Chemical Substances Control Act - Threshold Regulated Quantities	Hazard Prevention Standard for Specified Chemical Substances
Ammonium sulfate	Not Listed	Not Listed	Not Listed

China

Chemical Name	China - Catalogue of Occupational Hazard Factors	China - Dangerous Goods List	China - Catalog of Hypertoxic Chemicals	China - List of Dangerous Chemicals for Priority Management
Ammonium sulfate	Not Listed	Not Listed	Not Listed	Not Listed

SECTION 16: Other information

Reason for revision SDS sections updated.
Revision number 6
Revision date 14-Apr-2020

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References

- 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