

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

Identification of the substance or mixture

Product code AM7030
Product name RNAlater-ICE

Company/undertaking identification

Manufacturer/Supplier

Thermo Fisher Scientific Baltics UAB
V.Graiciuno 8
LT-02241 Vilnius
Lithuania
Tel.: +370 5 2602131
Fax.: +370 5 2602142

Emergency telephone number for China

For Chemical Emergency (Spill, Leak, Fire, Exposure or Accident), call
CHEMTREC Domestic North America: 1-800-424-9300 (24 hours)
CHEMTREC International: 1-703-527-3887 (collect calls accepted)

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

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

GHS - Classification

Signal Word
DANGER

Hazard pictograms



Health hazards

Specific target organ systemic toxicity (single exposure)	Category 2
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Physical hazards

GHS Physical Hazard 1	Flammable liquids
GHS Physical Hazard Category Number	Category 2

Environmental hazards**Hazard Statements**

H225 - Highly flammable liquid and vapor

H371 - May cause damage to organs if inhaled

Precautionary Statements**Prevention**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

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

P264 - Wash hands thoroughly after handling

P233 - Keep container tightly closed

Response

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

Storage

P403 + P235 - Store in a well-ventilated place. Keep cool

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

Not Applicable

HMIS

Health	4 * Chronic Hazard
Flammability	3
Reactivity	0

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Methyl alcohol 67-56-1 (1 - 5)	67-56-1	200-659-6	1 - 5
Isopropyl alcohol 67-63-0 (1 - 5)	67-63-0	200-661-7	1 - 5
Ethyl alcohol 64-17-5 (60 - 100)	64-17-5	200-578-6	60 - 100

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact	Wash off immediately with plenty of water. Take off contaminated clothing.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Ingestion	Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air.
Most important symptoms and effects, both acute and delayed	
H225 - Highly flammable liquid and vapor, H371 - May cause damage to organs if inhaled	
Notes to Physician	Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Dry chemical. Alcohol resistant foam. Water spray. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	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

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing vapors or mists. Use non-sparking tools and equipment. Ensure adequate ventilation. 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

Small spillage: Allow to evaporate. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Ventilate the area.

Large spillage: Dike for later disposal and cover with wet sand or earth. Immediately contact emergency personnel.

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. Avoid contact with eyes, skin and clothing. Do not breathe vapors. When using do not smoke, eat or drink. Ground and bond containers when transferring material. See Section 8 for more detail.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep in properly labeled containers. Store in accordance with local regulations.

Specific end use(s)

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Methyl alcohol	200 ppm 260 mg/m ³	None	200 ppm	250 ppm
Isopropyl alcohol	400 ppm 980 mg/m ³	None	200 ppm	400 ppm
Ethyl alcohol	1000 ppm 1900 mg/m ³	None	None	1000 ppm

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
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

Appearance	liquid	
Odor	Mixture has not been tested	
Odor Threshold	Mixture has not been tested	
pH	Mixture has not been tested	
Melting point / melting range	°C Mixture has not been tested	°F Mixture has not been tested
Boiling point / boiling range	°C >35	°F >95
Flash point	°C <23	°F <73.4
Autoignition Temperature	°C Mixture has not been tested	°F Mixture has not been tested
Decomposition temperature	°C Mixture has not been tested	°F Mixture has not been tested
Evaporation rate	No data available	
Flammability (solid, gas)	Not Applicable	
Upper explosion limit	Mixture has not been tested	
Lower explosion limit	Mixture has not been tested	
Vapor Pressure	Mixture has not been tested	
Relative density	Mixture has not been tested	
Specific gravity	No data available	
Solubility	Completely miscible with water	
Partition coefficient: n-octanol/water	No data available	
Viscosity	Mixture has not been tested	
Explosive properties	Mixture has not been tested	
Oxidizing properties	Mixture has not been tested	
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	High temperature. Proximity to sources of ignition.
Incompatible materials	Oxidizing agents. Acids. Bases.
Hazardous decomposition products	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)
Methyl alcohol	= 6200 mg/kg (Rat)	No data available	=64000ppm(Rat) =22500ppm(Rat)
Isopropyl alcohol	4396 mg/kg Oral LD50	No data available	=72600mg/m ³ (Rat)
Ethyl alcohol	= 7060 mg/kg (Rat)	No data available	=124.7mg/L(Rat)

Principal Routes of Exposure

Irritation	Conclusive but not sufficient for classification
Corrosivity	Conclusive but not sufficient for classification
Sensitization	Conclusive but not sufficient for classification
STOT - Single Exposure	Conclusive but not sufficient for classification
STOT - Repeated Exposure	Conclusive but not sufficient for classification
Carcinogenicity	Conclusive but not sufficient for classification
Mutagenicity	Conclusive but not sufficient for classification
Reproductive toxicity	Conclusive but not sufficient for classification
Aspiration hazard	Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Methyl alcohol	No data available	No data available	No data available	No data available	logPow-0.77
Isopropyl alcohol	Desmodesmus subspicatus EC50>1000 mg/L (96 h) Desmodesmus subspicatus EC50>1000 mg/L (72 h)	Daphnia magna EC50=13299 mg/L (48 h)	No data available	No data available	logPow0.05
Ethyl alcohol	No data available	Daphnia magna EC50=10800 mg/L (24 h) Daphnia magna EC50=2 mg/L (48 h) Daphnia magna LC509268 - 14221 mg/L (48 h)	No data available	No data available	logPow-0.32

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

Classified as dangerous in the meaning of transport regulations.

UN number	1170
UN proper shipping name	Ethanol solution
Transport hazard class(es)	3
Packing group	II
Environmental hazards	Not Hazardous
Special precautions for user	Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
Methyl alcohol 67-56-1 (1 - 5)	Listed
Isopropyl alcohol 67-63-0 (1 - 5)	Listed
Ethyl alcohol 64-17-5 (60 - 100)	Listed

US Federal Regulations

SARA 313

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers:.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Methyl alcohol	67-56-1	1 - 5	1.0
Isopropyl alcohol	67-63-0	1 - 5	1.0

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

This product contains the following HAPs:.

Component	CAS-No	Weight %	HAPS data
Methyl alcohol 67-56-1 (1 - 5)	67-56-1	1 - 5	Present

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	CAS-No	Weight %	Category
Methyl alcohol	67-56-1	1 - 5	Developmental
Ethyl alcohol	64-17-5	60 - 100	Carcinogen Developmental

WHMIS Hazard Class

B2 - Flammable liquid



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

SECTION 16: Other information

Reason for revision	SDS sections updated.
Revision number	7
Revision date	14-Apr-2017

For Research Use Only. Not for use in diagnostic procedures.

References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>

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- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

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End of Safety Data Sheet