

Safety Data Sheet

SECTION I: Product and Company Identification

1.1 Product identifiers

Product name: M19 RNase

Product Number: M3119

Brand: MEDNA

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

Identified uses: For research and development only.

1.3 Details of the supplier of the safety data sheet

Company : MEDNA Scientific, Inc.

Emergency phone number: 469-250-4424

SECTION II: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Respiratory Sensitization, Category 1

2.2 GHS Label elements, including precautionary statements



GHS Signal Word: Danger

GHS Hazard Phrases:

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

GHS Precaution Phrases:

P261: Avoid breathing {dust/fume/gas/mist/vapors/spray}.

P285: In case of inadequate ventilation wear respiratory protection.

GHS Response Phrases:

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+311: If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health

Material may be irritating to the mucous membranes and upper respiratory tract.

Effects and Symptoms May be harmful by inhalation, ingestion, or skin absorption.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause eye, skin, or respiratory system irritation.
To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

SECTION III: Composition/information on ingredients

3.1 Substances

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
9001-99-4 RF0760000	Ribonuclease	1.0 -10.0 %	232-646-6 NA	Resp. Sens. 1: H334
7732-18-5 ZC0110000	Water	90.0 -99.0 %	231-791-2 NA	No data available.

SECTION IV: First aid measures

4.1 Description of first aid measures

If inhaled

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention

In case of skin contact

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In case of eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

If swallowed

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 Important Symptoms and Effects, Both Acute and Delayed:

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

SECTION V: Firefighting measures

5.1 Flammable properties

Not determined.

5.2 Flash point

Not determined.

5.3 Suitable extinguishing media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Use water spray to cool fire-exposed containers.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

5.4 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 to prevent contact with skin and eyes.

SECTION VI: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental precautions

Prevent material from entering drains and water courses.

6.3 Methods and materials for containment and cleaning up

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations

SECTION VII: Handling and storage

7.1 Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in accordance with information listed on the product insert.

SECTION VIII: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Engineering measures

Showers, eyewash stations, ventilation systems.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin and body protection

Chemical resistant gloves and lab coat.

Respiratory protection

NIOSH approved respirator, as conditions warrant.

Hygiene measures

Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SECTION IX: Physical and chemical properties

9.1 Basic physical and chemical properties

- a) Appearance Form: Colorless
- b) Odor: Mild
- c) Odor threshold: No information available
- d) pH: No information available.
- e) Physical state at 20 degrees C: Liquid
- f) Flash point: No information available
- g) Decomposition temperature: No information available.
- h) Flammability limits in air: No information available.
- i) Explosion limits: No information available.
- j) Specific gravity: No information available.
- k) Solubility: No information available.
- l) Evaporation rate: No information available
- m) Vapor Pressure @20°C (kPa): No information available
- n) Vapor density: No data available
- o) VOC Content(%): Not applicable

9.2 Other safety information

No data available

SECTION X: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

None known.

SECTION XI: Toxicological information

11.1 Information on Toxicological Effects: The toxicological effects of this compound have not been thoroughly studied.

Ribonuclease - Toxicity Data: Subcutaneous LD50 (rat): 290 mg/kg

Chronic Toxicological Effects: Ribonuclease - Investigated as a mutagen.

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.

See actual entry in RTECS for complete information.
Ribonuclease RTECS Number: RF0760000

SECTION XII: Ecological information**12.1 Toxicity**

Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

SECTION XIII: Disposal considerations**13.1 Waste treatment methods****Product**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation

Contaminated packaging

Do not reuse empty containers.

SECTION XIV: Transport information**DOT (US)**

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION XV: Regulatory information**SARA 302 Components**

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute health hazard	no
Chronic health hazard	no
Fire hazard	no

Sudden release of pressure hazard no

Reactive hazard no

No US State right to know regulations

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

SECTION XVI: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEDNA Scientific shall not be held liable for any damage resulting from handling or from contact with the above product.

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