

Material Safety Data Sheet



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1. Identification of substance

Product details

- **Trade name:** RNase A
- **MSDS No.:** BRNase

2. Composition/Data on components

Chemical characterization

- **Description:** Mixture of the substances listed below with non-hazardous additions.
- **Dangerous components:** 9001-99-4 Nuclease, ribo- 2.5-10 %

3. Hazards identification

- **Hazard description:** Harmful
- **Information pertaining to particular dangers for man and environment:** May cause sensitization by inhalation and skin contact.
- **Classification system:** The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0-4):**

Health = 0

Fire = 0

Reactivity = 0

- **WHMIS-ratings (scale 0-4):**

Health = *0

Fire = 0

Reactivity = 0

4. First aid measures

- **After inhalation:** Supply fresh air. Consult a physician if symptoms appear/persist.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse affected eye opened for several minutes under running water. Consult a physician.
- **After swallowing:** Immediately seek medical advice/assistance.

5. Fire fighting measures

- **Suitable extinguishing agents:** CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Do not inhale explosion gases or combustion gases.

6. Accidental release measures

- **Person-related safety precautions:** Not required.

- **Measures for environmental protection:** Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7. Handling and storage

Handling

- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.

Storage

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Class according to regulation on flammable liquids:** Void

8. Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists that were valid during the creation were used as basis.

Personal protective equipment

- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves
- **Eye protection:** Tightly sealed goggles

9. Physical and chemical properties

- **Form:** Fluid
- **Color:** According to product specification
- **Odor:** Characteristic

Value/range Unit Method

Change in condition

- **Melting point/melting range:** Undetermined.
- **Boiling point/boiling range:** Undetermined.
- **Flash point:** Not applicable.
- **Auto-ignition:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.

- **Vapor pressure at 20°C:** 23 hPa
- **Density:** Not determined.
- **Solubility in water:** Fully soluble.
- **pH value: at 20°C:** 6.8

10. Stability and reactivity

- **Thermal decomposition/conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:** Reacts with acids, alkalis and oxidizing agents.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11. Toxicological information

Acute toxicity

Primary irritant effect

- **On the skin:** Irritant to skin and mucous membranes.
- **In the eyes:** Irritating effect.
- **Sensitization:** Sensitization possible through inhalation. Sensitization possible through skin contact.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful, Irritant.

12. Ecological information

General notes

- **Water hazard class 1 (Self-assessment):** Slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. Disposal considerations

- **Product recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14. Transport information

DOT regulations

- **Hazard class:** -

Land transport ADR/RID (cross-border)

- **ADR/RID class:** -

Maritime transport IMDG

- **IMDG Class:** -
- **Marine pollutant:** No

Air transport ICAO-TI and IATA-DGR

- **ICAO/IATA Class:** -15

15. Regulations

Sara

- **Section 355 (extremely hazardous substances):** None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

- **TSCA (Toxic Substances Control Act):** All ingredients are listed.

Proposition 65

- **Chemicals known to cause cancer:** None of the ingredients is listed.
- **Chemicals known to cause reproductive toxicity:** None of the ingredients is listed.
- **Product related hazard information:** The product has been classified and marked in accordance with directives on hazardous materials.
- **Hazard symbols:** Harmful
- **Hazard-determining components of labeling:** Nuclease.
- **Risk phrases:** May cause sensitization by inhalation and skin contact.
- **Safety phrases:** Do not breathe gas/fumes/vapor/spray. Avoid contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing and gloves.

National regulations

- **Classification according to VbF:** Void

Water hazard class

- **Water Hazard Class 1 (Self-assessment):** Slightly hazardous for water.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.