# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 3.0 Revision Date 07/15/2007 Print Date 04/03/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Ribonuclease A from bovine pancreas

Product Number : R6513 Brand : Sigma

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # : (314) 776-6555

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Pancreatic Ribonuclease

RNase A Ribonuclease A Ribonuclease I

Ribonucleate 3'-pyrimidinooligonucleotidohydrolase

CAS-No.	EC-No.	Index-No.	Concentration [%]
Nuclease, ribo-			
9001-99-4	232-646-6	-	-

## 3. HAZARDS IDENTIFICATION

Emergency Overview OSHA Hazards

No OSHA Hazards

HMIS Classification Health Hazard: 0 Flammability: 0

Physical hazards: 0

**NFPA Rating** 

Health Hazard: 0

Fire: 0

Reactivity Hazard: 0
Potential Health Effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

#### 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

### In case of skin contact

Wash off with soap and plenty of water.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIRE-FIGHTING MEASURES

### Flammable properties

Flash point no data available Ignition temperature no data available

## Suitable extinguishing media

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

## Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **6. ACCIDENTAL RELEASE MEASURES**

## **Personal precautions**

Avoid dust formation.

## **Environmental precautions**

Do not let product enter drains.

#### Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

#### Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

## Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

For prolonged or repeated contact use protective gloves.

## Eye protection

Safety glasses

## Hygiene measures

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### **Appearance**

Form solid

Colour no data available

Safety data

pΗ no data available Melting point no data available Boiling point no data available Flash point no data available Ignition temperature no data available Lower explosion limit no data available Upper explosion limit no data available Water solubility no data available

#### 10. STABILITY AND REACTIVITY

## Storage stability

Stable under recommended storage conditions.

## Materials to avoid

Strong oxidizing agents

#### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.

Nature of decomposition products not known.

## 11. TOXICOLOGICAL INFORMATION

## **Acute toxicity**

LD50 Subcutaneous - rat - 290 mg/kg

## Irritation and corrosion

no data available

#### **Sensitisation**

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

## **Chronic exposure**

no data available

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eves** May cause eye irritation. May be harmful if swallowed. Ingestion

## 12. ECOLOGICAL INFORMATION

## Elimination information (persistence and degradability)

no data available

## **Ecotoxicity effects**

no data available

## Further information on ecology

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Observe all federal, state, and local environmental regulations.

## Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

## DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

Not dangerous goods

## 15. REGULATORY INFORMATION

#### **OSHA Hazards**

No OSHA Hazards

#### **TSCA Status**

On TSCA Inventory

## **DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

CAS-No. 9001-99-4

Nuclease, ribo-

#### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

SARA 313: 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

No SARA Hazards

## **Massachusetts Right To Know Components**

No Components Listed

## Pennsylvania Right To Know Components

CAS-No. Nuclease, ribo-9001-99-4 **Revision Date** 

**Revision Date** 

**New Jersey Right To Know Components** 

CAS-No.

9001-99-4

## California Prop. 65 Components

Nuclease, ribo-

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

#### **16. OTHER INFORMATION**

#### **Further information**

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