
1. IDENTIFICATION

Product Name	DNase I lyophilized
Recommended use of the chemical and restrictions on use	
Identified Uses	For Research and Development Use Only
Company Identification	Covaris, Inc. 14 Gill Street, Unit H Woburn, MA 01801 (781) 932-3959
Customer Information Number	
Emergency Telephone Number	
Chemtrec Number	(800) 424-9300 (for emergencies only)
Issue Date	March 10, 2014
Supersedes Date	

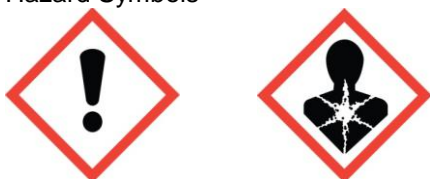
Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2. HAZARD IDENTIFICATION

Hazard Classification
Skin sensitizer - Category 1
Respiratory Sensitizer - Category 1

Label Elements

Hazard Symbols



Signal Word: Danger

Hazard Statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

Precautionary Statements**Prevention**

Avoid breathing dusts.
Wear protective gloves.
In case of inadequate ventilation wear respiratory protection.
Contaminated work clothing must not be allowed out of the workplace.

Response

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
Wash contaminated clothing before re-use.
If on skin: Wash with plenty of soap and water.
If experiencing respiratory symptoms call a poison centre or doctor/physician.
If skin irritation or rash occurs, seek medical advice/attention.

Storage

None

2. HAZARD IDENTIFICATION

Disposal

Dispose of contents/container in accordance with local regulation.

Other Hazards

None

Specific Concentration Limits

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity	20 - 30 %
Acute dermal toxicity	90 - 100%
Acute inhalation toxicity	100%
Acute aquatic toxicity	100%

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component	CAS Number	Concentration
Nuclease, deoxyribo-	9003-98-9	5 – 15%
Calcium Chloride	10043-52-4	<10%

4. FIRST- AID MEASURES

Description of necessary first-aid measures**Eyes**

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin

Wash affected area with plenty of water. Seek medical attention if symptoms persist.

Ingestion

Do not induce vomiting. Have victim drink 1-3 glasses of water to dilute stomach contents. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing. Obtain medical attention immediately.

Inhalation

Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed

Aside from the information found under description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed**Notes to Physicians**

Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Suitable (and unsuitable) Extinguishing Media

Use foam, dry chemical or carbon dioxide. Use water spray for surroundings and containers.

Specific hazards arising from the chemical

None known.

Special Protective Actions for Fire-Fighters

Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing.

Environmental Precautions

Prevent the material from entering drains or watercourses.

Methods and materials for containment and cleaning up

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear appropriate protective equipment when handling. Do not eat or drink while handling this material.

Conditions for safe storage

Store at room temperature away from heat and direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Nuclease, deoxyribo-

None established.

Calcium chloride

None established.

Appropriate engineering controls

No specific measures necessary.

Individual protection measures**Respiratory Protection**

Respiratory protection not normally required.

Skin Protection

Chemical resistant gloves

Eye/Face Protection

Chemical goggles or safety glasses with side shields

Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State	Solid
Color	Colorless
Odor	Odorless
Odor Threshold	No data available
pH	No data available
Density	No data available
Boiling Range/Point (°C/F)	No data available
Melting Point (°C/F)	No data available
Flash Point (PMCC) (°C/F)	No data available
Vapor Pressure	No data available
Evaporation Rate (BuAc=1)	No data available
Solubility in Water	Soluble
Vapor Density (Air = 1)	No data available
VOC (g/l)	No data available
Partition coefficient (n-octanol/water)	No data available
Viscosity	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Upper explosive limit	No data available
Lower explosive limit	No data available
Flammability (solid, gas)	Not applicable

10. STABILITY AND REACTIVITY

Reactivity

No known reactivity.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Heat – high temperatures

Incompatible Materials

None known

Hazardous Decomposition Products

None known

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Calcium Chloride:

LD50 Oral Rat 2301 mg/kg

LD50 Dermal Rabbit >5000 mg/kg

11. TOXICOLOGICAL INFORMATION

Specific Target Organ Toxicity (STOT) – single exposure

Available data indicates this product is not expected to cause target organ effects after a single exposure.

Specific Target Organ Toxicity (STOT) – repeat exposure

Available data indicates this product is not expected to cause target organ effects after repeated exposure.

Serious Eye damage/Irritation

Product: Hazardous components in this product are not present at levels that are expected to cause eye irritation.

Calcium chloride: Irritating to eyes in rabbit studies.

Skin Corrosion/Irritation

Available data indicates this product is not expected to cause skin irritation.

Respiratory or Skin Sensitization

Nuclease, deoxyribo-: May cause skin and respiratory sensitization.

Carcinogenicity

Not considered carcinogenic by NTP, IARC, and OSHA.

Germ Cell Mutagenicity

Available data indicates this product is not expected to be mutagenic.

Reproductive Toxicity

Available data indicates this product is not expected to cause reproductive toxicity or birth defects.

Aspiration Hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No relevant studies identified.

Mobility in soil

No relevant studies identified.

Persistence/Degradability

No relevant studies identified.

Bioaccumulative Potential

No relevant studies identified.

Other adverse effects

No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

Contact supplier for transport information.

15. REGULATORY INFORMATION

United States TSCA Inventory

All components of this product are in compliance with the inventory listing requirements of the US Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

Canada DSL Inventory

All ingredients in this product have not been verified for inclusion on the Domestic Substance List (DSL).

WHMIS Classification

D2A.D2B

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

SARA Title III Sect. 311/312 Categorization

Immediate (Acute)

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 0

NFPA Code for Health - 2

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

HMIS Ratings

HMIS Code for Flammability - 0

HMIS Code for Health - *2

HMIS Code for Physical Hazard - 0

HMIS Code for Personal Protection - See Section 8

*Chronic

Legend

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service ECHA: European Chemicals Agency

IARC: International Agency for Research on Cancer

N/A: Denotes no applicable information found or available

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

SDS: Safety Data Sheet

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value

Information Source and References

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By:

EnviroNet LLC.

16. OTHER INFORMATION

The information and recommendations presented in this SDS are based on sources believed to be accurate. Covaris assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the **material** for their particular purposes. In particular, we make **NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED**, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use **or disposal** of the material is in accordance with applicable Federal, State, and local laws and regulations.
