

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Deoxyribonuclease I, from bovine pancreas

Other means of identification

Product Code(s) A4193

Synonyms No information available

Product Use For Laboratory Research Use Only.

Supplier/Manufacturer

Biomatik Corporation
9-140 McGovern Dr.
Cambridge, Ontario N3H 4R7
Canada

Telephone Number 1-519-489-7195

E-mail Address info@biomatik.com

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

WHMIS Classification

Not WHMIS controlled.

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

Label elements

Health hazard: 0

Flammability: 0

Physical hazards: 0

Emergency Overview

Appearance: Powder, beige

Physical State: Solid

Odor:

Hazards not otherwise classified (HNOC)

Possible sensitizer

Other Information**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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Deoxyribonuclease I	9003-98-9	232-667-0	<=100%	N/A

4. FIRST AID MEASURES**First Aid Measures**

Eye Contact	Flush eyes with water as a precaution.
Skin Contact	Wash off with soap and plenty of water.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed**Most Important Symptoms/Effects****Indication of any immediate medical attention and special treatment needed****Notes to Physician****5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

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

Specific Hazards Arising from the Chemical

NONE

Explosion Data

Sensitivity to Mechanical Impact	no data available
Sensitivity to Static Discharge	no data available

Protective Equipment and Precautions for Firefighters

Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection

Avoid dust formation. Avoid breathing vapours, mist or gas

Environmental Precautions

Environmental Precautions

Do not let product enter drains

Methods and material for containment and cleaning up

Methods for Containment / Cleaning Up

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

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Provide appropriate exhaust ventilation at places where dust is formed

Conditions for safe storage, including any incompatibilities

Storage

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

Recommended storage temperature: -20 °C

Keep in a dry place.

Incompatible Products

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Deoxyribonuclease I	-	-	-

Appropriate engineering controls

Engineering Measures

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Skin and Body Protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break

through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11

mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario

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)

Hygiene Measures

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State

Appearance

Color

Odor

Odor Threshold

Property

Values

Remarks • Method

pH

no data available

Melting point/freezing point

no data available

Boiling Point/Range

no data available

Flash Point (High in °C)

no data available

Evaporation Rate

Flammability (solid, gas)

Flammability Limit in Air

no data available

Upper flammability limit:

no data available

Lower flammability limit:

no data available

Vapor pressure

no data available

Vapor Density

no data available

Specific Gravity

no data available

Water Solubility

no data available

Solubility in other solvents

no data available

Partition coefficient

no data available

Autoignition Temperature

no data available

Decomposition Temperature	no data available
Kinematic viscosity	no data available
Dynamic viscosity	no data available
Explosive Properties	no data available
Oxidizing Properties	no data available

Other Information

Softening Point	no data available
Molecular Weight	
VOC Content	no data available
Density	
Bulk Density	

10. STABILITY AND REACTIVITY

Reactivity

N/A

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

no data available

Conditions to Avoid

no data available

Incompatible Materials

Strong oxidizing agents

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information****Inhalation** no data available**Eye Contact** no data available**Skin Contact** no data available**Ingestion** no data available

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Deoxyribonuclease I	-	-	-

Information on toxicological effects

Symptoms**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Sensitization**

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

Mutagenic Effects

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Chemical Name	ACGIH	IARC	NTP	OSHA
Deoxyribonuclease I	-	-	-	-

Reproductive Toxicity

no data available

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration hazard**Numerical measures of toxicity - Product Information****Potential health effects**

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure

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

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Deoxyribonuclease I	-	-	-

Persistence and Degradability no data available

Bioaccumulation/Accumulation no data available

Chemical Name	Partition coefficient
Deoxyribonuclease I	-

Other Adverse Effects no data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Offer surplus and non-recyclable solutions to a licensed disposal company

Contaminated Packaging

Dispose of as unused product

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Deoxyribonuclease I	-	-	-	-

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Deoxyribonuclease I	-	-	-	-

Chemical Name	California Hazardous Waste Status
Deoxyribonuclease I	-

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

WHMIS Classification

Not WHMIS controlled.

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

16. OTHER INFORMATION

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet