

Date of	compilation: 06/01/20	20 Versi	ion: 1			
SEC	TION 1: IDENTIFIC	ATION OF TH	HE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING			
1.1	Product identifier:	: MB199 - NZY	DNAse I			
		rDNase				
	CAS:	9003-98-9				
	EC:	232-667-0				
	Index:	Non-applicable	e			
	REACH:	Non-applicable	e			
1.2	Relevant identifie	d uses of the s	substance or mixture and uses advised against:			
	Relevant uses: Laboratory. For professional user only.					
	Uses advised against: All uses not specified in this section or in section 7.3					
1.3	Details of the sup	plier of the sat	fety data sheet:			
	NZYTech Estrada do Paco do Lumiar Campus do Lumiar - Edif. E, r/c 1649-038 Lisboa - Lisboa - Portugal info@nzytech.com www.nzytech.com					
1.4	Emergency teleph	one number:	+351 213 643 514 Local time: Monday to Friday 9.00 am to 18.00 National Poison Information Centre (Europe UK): +44 0845 4647 (this service is only available to health professionals)			
SEC	TION 2: HAZARDS I		ΤΟΝ			
SEC	TION Z. HAZARDS .	IDENTIFICAT				
2.1	Classification of the substance or mixture:					
	CLP Regulation (E	C) No 1272/2	.008:			
	Classification of this	product has be	en carried out in accordance with CLP Regulation (EC) No. 1272/2008.			

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

P284: Wear respiratory protection

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Chemical description: Organic substance

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:



Date of compilation: 06/01/2020 Version: 1

SECT	TION 3: COMPOSITIC	N/INFORMATION	ON INGREDIENTS (continued)	
	Identification		Chemical name/Classification	Concentration
	CAS: 9003-98-9	rDNase	Self-classified	
	EC: 232-667-0 Index: Non-applicable REACH: Non-applicable		Resp. Sens. 1: H334 - Danger	100 %
	To obtain more information	ation on the hazards	of the substances consult sections 11, 12 and 16.	
3.2	Mixture:			
	Non-applicable			

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet

By eye contact:

This product does not contain substances classified as hazardous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

By ingestion/aspiration:

In case of consumption, seek immediate medical assistance showing the SDS for the product.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:



Date of compilation: 06/01/2020 Version: 1

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3

DNEL (Workers):

Non-applicable

DNEL (General population):

Non-applicable

PNEC:

Non-applicable

8.2 Exposure controls:

A.- General security and hygiene measures in the work place



compi	ilation: 06/01/202	20 Version	: 1				
ΓION	8: EXPOSURE	CONTROLS/PE	RSONAL PROT	ECTION	(continued)		
1 () () (marking>> in acc cleaning, mainten information see s All information co	cordance with Dire hance, class of pro ubsection 7.1. ntained herein is a whether the com	ective 89/686/EC. tection,) consu a recommendatio	For more It the info n which n	information on Pers rmation leaflet provid	onal Pro ded by t	with the corresponding < <ce tective Equipment (storage, use, he manufacturer. For more n the labour risk prevention servic</ce
ſ	Pictogram	PPE	Labellir	ng	CEN Standard		Remarks
	Mandatory respiratory tract protection	Filter mask for gase vapours	es and	E I	N 405:2001+A1:2009	cc cc	lace when there is a taste or smell of the ontaminant inside the face mask. If the contaminant comes with warnings it is commended to use isolation equipment.
C 5	Specific protection	n for the hands	-				
Γ	Pictogram	PPE	Labellir	ng	CEN Standard		Remarks
	Mandatory hand protection	Protective gloves a minor risks	igainst	U -		prolon professi	e gloves in case of any sign of damage. F iged periods of exposure to the product for ional users/industrials, we recommend us gloves in line with standards EN 420:2003 A1:2009 and EN ISO 374-1:2016
D (Ocular and facial	protection					
	Pictogram	PPE	Labellir	ng	CEN Standard		Remarks
	Mandatory face protection	Panoramic glasses a splash/projectio		Ę	EN 166:2001 EN ISO 4007:2018		daily and disinfect periodically according anufacturer´s instructions. Use if there is risk of splashing.
E E	Body protection						
Г	Pictogram	PPE	Labellir	ng	CEN Standard		Remarks
		Work clothing		Ę		period recom	te before any evidence of deterioration. Fr is of prolonged exposure to the product for professional/industrial users CE III is mended, in accordance with the regulation (SO 6529:2013, EN ISO 6530:2005, EN IS 13688:2013, EN 464:1994.
		Anti-slip work sh	noes		EN ISO 20347:2012	period recom	te before any evidence of deterioration. Fr is of prolonged exposure to the product for professional/industrial users CE III is mended, in accordance with the regulatio EN ISO 20345:2012 y EN 13832-1:2007
F /	Additional emerge	ency measures					
	Emergency mea	asure	Standards		Emergency meas	ure	Standards
	Emergency sho		ANSI Z358-1 864-1:2011, ISO 386	4-4:2011	Eyewash station	าร	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
In a spilla Vola With	ccordance with the p age of both the p atile organic co n regard to Direct V.O.C. (Supply): V.O.C. density at	product and its cor mpounds: ive 2010/75/EU, t 20 °C:	htainer. For additi his product has t 0 % weight 0 kg/m³ (0 g/l	onal inforr he followii	f the environment it nation see subsectio ng characteristics:		nmended to avoid environmental
	Average carbon n		Non-applicable				
	Average molecula	ir weight:	Non-applicable				



te of	compilation: 06/01/2020 Version: 1					
SECT	TION 9: PHYSICAL AND CHEMICAL PROPER	TIES				
9.1	Information on basic physical and chemical properties:					
	For complete information see the product datasheet.					
	Appearance:					
	Physical state at 20 °C:	Solid				
	Appearance:	Not available				
	Colour:	White				
	Odour:	Odourless				
	Odour threshold:	Non-applicable *				
	Volatility:					
	Boiling point at atmospheric pressure:	Non-applicable *				
	Vapour pressure at 20 °C:	Non-applicable *				
	Vapour pressure at 50 °C:	Non-applicable *				
	Evaporation rate at 20 °C:	Non-applicable *				
	Product description:					
	Density at 20 °C:	Non-applicable *				
	Relative density at 20 °C:	Non-applicable *				
	Dynamic viscosity at 20 °C:	Non-applicable *				
	Kinematic viscosity at 20 °C:	Non-applicable *				
	Kinematic viscosity at 40 °C:	Non-applicable *				
	Concentration:	Non-applicable *				
	pH:	Non-applicable *				
	Vapour density at 20 °C:	Non-applicable *				
	Partition coefficient n-octanol/water 20 °C:	Non-applicable *				
	Solubility in water at 20 °C:	Non-applicable *				
	Solubility properties:	Non-applicable *				
	Decomposition temperature:	Non-applicable *				
	Melting point/freezing point:	Non-applicable *				
	Explosive properties:	Non-applicable *				
	Oxidising properties:	Non-applicable *				
	Flammability:					
	Flash Point:	Non-applicable				
	Flammability (solid, gas):	Non-applicable *				
	Autoignition temperature:	Non-applicable *				
	Lower flammability limit:	Non-applicable *				
	Upper flammability limit:	Non-applicable *				
	Explosive:					
	Lower explosive limit:	Non-applicable *				
	Upper explosive limit:	Non-applicable *				
9.2	Other information:					
	Surface tension at 20 °C:	Non-applicable *				
	Refraction index:	Non-applicable *				
	*Not relevant due to the nature of the product, not providing	g information property of its hazards.				

SECTION 10: STABILITY AND REACTIVITY



Date of compilation: 06/01/2020 Version: 1

SECTION 10: STABILITY AND REACTIVITY (continued)

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Not applicable	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- B- Inhalation (acute effect):
 - Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.
 - Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
 - IARC: Non-applicable
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:



Date of compilation: 06/01/2020 Version: 1 SECTION 11: TOXICOLOGICAL INFORMATION (continued) - Respiratory: Prolonged exposure can result in specific respiratory hypersensitivity. Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. F- Specific target organ toxicity (STOT) - single exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. G- Specific target organ toxicity (STOT)-repeated exposure: Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. H- Aspiration hazard: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3. **Other information:** Non-applicable Specific toxicology information on the substances: Identification Acute toxicity Genus rDNase LD50 oral >2000 mg/kg CAS: 9003-98-9 LD50 dermal >2000 mg/kg LC50 inhalation Non-applicable EC: 232-667-0 SECTION 12: ECOLOGICAL INFORMATION 12.1 Toxicity: Not available 12.2 Persistence and degradability: Not available 12.3 Bioaccumulative potential: Not available 12.4 Mobility in soil: Not available 12.5 Results of PBT and vPvB assessment: Product fails to meet PBT/vPvB criteria 12.6 Other adverse effects: Not described SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 03 05*	organic wastes containing hazardous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP13 Sensitising

Waste management (disposal and evaluation):



Date of compilation: 06/01/2020 Version: 1

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:

- - - - -		
14.1	UN number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	Transport in bulk according	Non-applicable
	to Annex II of Marpol and the IBC Code:	
_		
•	rt of dangerous goods by sea:	
With rega	rd to IMDG 38-16:	
14.1	UN number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	Transport in bulk according	Non-applicable
	to Annex II of Marpol and	
_	the IBC Code:	
Transpo	rt of dangerous goods by air:	
With rega	rd to IATA/ICAO 2019:	



Date of compilation: 06/01/2020 Version: 1

SECTION 14: 7	RANSPORT INFORMATION (continued)
14.1	UN number:	Non-applicable
14.2	UN proper shipping name:	Non-applicable
14.3	Transport hazard class(es):	Non-applicable
	Labels:	Non-applicable
14.4	Packing group:	Non-applicable
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Physico-Chemical properties:	see section 9
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.: Non-applicable

Texts of the legislative phrases mentioned in section 2:

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

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:



Date of compilation: 06/01/2020 Version: 1

EC I I	DN 16: OTHER INFORMATION (continued)
ł	nttp://echa.europa.eu
ł	http://eur-lex.europa.eu
	Abbreviations and acronyms:
A	ADR: European agreement concerning the international carriage of dangerous goods by road
I	MDG: International maritime dangerous goods code
I	ATA: International Air Transport Association
I	CAO: International Civil Aviation Organisation
	COD: Chemical Oxygen Demand
	30D5: 5-day biochemical oxygen demand
-	3CF: Bioconcentration factor
-	D50: Lethal Dose 50
-	C50: Lethal Concentration 50
-	C50: Effective concentration 50
	og-POW: Octanol-water partition coefficient
ŀ	Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.