

Revision date 06-May-2023

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

Version 9

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Product No	P0720
Product name	Neuraminidase
Pure substance/mixture	Mixture
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended use	This product is for research and development only
Uses advised against	No information available
1.3. Details of the supplier of the sa	fety data sheet
Supplier Address New England BioLabs 240 County Road Ipswich, MA 01938 USA	
For further information, please contact	<u>t</u>
Company Phone Number	978-927-5054, 800-632-5227 (toll free)
Telefax	978-921-1350
E-mail address	info@neb.com
1.4. Emergency telephone number	_
24 Hour Emergency Phone Number	Chemtrec +44 20 3885 0382
Europe	+1 978-380-2125

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

No information available.

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable
- 3.2 Mixtures

Chemical	Weight-%	REACH registration	EC No (EU Index	Classification according to	Specific	M-Facto	M-Factor
name		number	No)	Regulation (EC) No.	concentratio	r	(long-ter
				1272/2008 [CLP]	n limit (SCL)		m)
Sodium	0.1 - 1	No data available	231-598-3	No data available	-	-	-
Chloride							
7647-14-5							
Ethylenedia	0.1 - 1	No data available	(607-429-00-8)	Eye Irrit. 2 (H319)	-	-	-
mine			200-449-4				
tetraacetic							
acid							
60-00-4							

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg		Inhalation LC50 - 4 hour - vapor - mg/L	
			mg/L		• • • •
Sodium Chloride 7647-14-5	3000	10000	No data available	No data available	No data available
Ethylenediamine tetraacetic acid 60-00-4	2000	No data available	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures		
4.1. Description of first a	id measures	
Inhalation	Remove to fresh air.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.	
Ingestion	Rinse mouth.	

4.2. Most important symptoms and effects, both acute and delayed			
Symptoms	No information available.		
Effects of Exposure	No information available.		

4.3. Indication of any immediate medical attention and special treatment neededNote to physiciansTreat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
5.2. Special hazards arising from the	e substance or mixture
Specific hazards arising from the chemical	No information available.
5.3. Advice for firefighters	
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions	
Environmental precautions	See Section 12 for additional Ecological Information.
6.3. Methods and material for conta	inment and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
6.4. Reference to other sections	
Reference to other sections	See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	
Advice on safe handling	Ensure adequate ventilation.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510)	Storage class 10.
7.3. Specific end use(s)	
Risk management methods [RMM]	The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

xposure Limits This product, as supplied, does not contain any hazardous materials with occupational				th occupational	
exposure limits established by the region specific regulatory bodies.					
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sodium Chloride	-	-	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³
7647-14-5				-	-

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
Tris-HCI	-	216.6 mg/kg bw/day [4] [6]	152.8 mg/m ³ [4] [6]
1185-53-1			
Sodium Chloride	-	295.52 mg/kg bw/day [4] [6]	2068.62 mg/m ³ [4] [6]
7647-14-5		295.52 mg/kg bw/day [4] [7]	2068.62 mg/m ³ [4] [7]

Chemical name	Oral	Dermal	Inhalation
Ethylenediamine tetraacetic acid	-	-	1.5 mg/m³ [5] [6]
60-00-4			3 mg/m ³ [5] [7]

Notes

[4]	Systemic health effects.
[5]	Local health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Tris-HCI	10.8 mg/kg bw/day [4] [6]	-	37.7 mg/m ³ [4] [6]
1185-53-1			-
Sodium Chloride	126.65 mg/kg bw/day [4] [6]	126.65 mg/kg bw/day [4] [6]	443.28 mg/m ³ [4] [6]
7647-14-5	126.65 mg/kg bw/day [4] [7]	126.65 mg/kg bw/day [4] [7]	443.28 mg/m ³ [4] [7]
Ethylenediamine tetraacetic acid	25 mg/kg bw/day [4] [6]	-	0.6 mg/m³ [5] [6]
60-00-4			1.2 mg/m ³ [5] [7]

Notes

[4] [5]	Systemic health effects. Local health effects.
[6]	Long term.
[7]	Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Sodium Chloride 7647-14-5	5 mg/L	-	-	-	-
Ethylenediamine tetraacetic acid 60-00-4	2.2 mg/L	1.2 mg/L	0.22 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Sodium Chloride 7647-14-5	-	-	500 mg/L	4.86 mg/kg soil dw	-
Ethylenediamine tetraacetic acid 60-00-4	-	-	43 mg/L	0.72 mg/kg soil dw	-

 8.2. Exposure controls
 No information available.

 Engineering controls
 No information available.

 Individual protection measures, such as personal protective equipment Eye/face protection
 No special protective equipment required.

Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical propertiesPhysical stateLiquidAppearanceColorlessColorNo information availableOdorMild.Odor thresholdNo information available

Property	Values	Remarks • Method
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang		None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Flash point	No data available	None known
Autoignition temperature	200 °C	
Decomposition temperature		None known
рН	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapor pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Vapor density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity	
Reactivity	No information available.
10.2. Chemical stability	
Stability	Stable under normal conditions.
Explosion data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.
10.3. Possibility of hazardous react	ions
Possibility of hazardous reactions	None under normal processing.
10.4. Conditions to avoid	
Conditions to avoid	None known based on information supplied.
10.5. Incompatible materials	
Incompatible materials	None known based on information supplied.
10.6. Hazardous decomposition pro	ducts

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	99,999.00	mg/kg
ATEmix (dermal)	99,999.00	mg/kg
ATEmix (inhalation-gas)	99,999.00	ppm
ATEmix (inhalation-vapor)	99,999.00	mg/l
ATEmix (inhalation-dust/mist)	99,999.00	mg/l

Component Information

Component Information Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Chloride	= 3 g/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat) 1 h
thylenediamine tetraacetic acid	> 2000 mg/kg (Rat)	-	-
Delayed and immediate effects	as well as chronic effects from	n short and long-term exposure	<u>. </u>
Skin corrosion/irritation	No information available.		
Serious eye damage/eye irritatio	on No information available.		
Respiratory or skin sensitizatio	n No information available.		
Germ cell mutagenicity	No information available.		
Carcinogenicity	No information available.		
Reproductive toxicity	No information available.		
STOT - single exposure	No information available.		
STOT - repeated exposure	No information available.		
Aspiration hazard	No information available.		
1.2. Information on other haza	ards		
1.2.1. Endocrine disrupting p	roperties		
Endocrine disrupting properties	No information available.		
1.2.2. Other information			
Other adverse effects	No information available.		
SECTION 12: Ecologica	l information		
12.1. Toxicity			
Ecotoxicity			

Ecotoxicity

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
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Sodium Chloride	_	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L (96h, Pimephales promelas) LC50: =7050mg/L (96h, Pimephales promelas) LC50: 6420 - 6700mg/L (96h, Pimephales promelas) LC50: 4747 - 7824mg/L (96h, Oncorhynchus mykiss)	-	EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)
Ethylenediamine tetraacetic acid	EC50: =1.01mg/L (72h, Desmodesmus subspicatus)	LC50: 34 - 62mg/L (96h, Lepomis macrochirus) LC50: 44.2 - 76.5mg/L (96h, Pimephales promelas)	-	EC50: =113mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available.

Chemical name	PBT and vPvB assessment
Sodium Chloride	The substance is not PBT / vPvB
Ethylenediamine tetraacetic acid	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	environmental legislation.

Contaminated packaging

Do not reuse empty containers.

SECTION 14: Transport information

IATA 14.1 UN number or ID number 14.2 Extended Proper Shipping Name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazard 14.6 Special precautions for user Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable None
	None
IMDG 14.1 UN number or ID number 14.2 Extended Proper Shipping Name	Not regulated Not regulated
 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazard 14.6 Special precautions for user Special Provisions 14.7 Maritime transport in bulk 	Not regulated Not regulated Not applicable None No information available
according to IMO instruments	
RID 14.1 UN/ID No 14.2 Extended Proper Shipping Name	Not regulated Not regulated
 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazard 14.6 Special precautions for user 	Not regulated Not regulated Not applicable
Special Provisions	None
ADR 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazard 14.6 Special precautions for user Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable

SECTION 15: Regulatory information

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

Chemical name	French RG number
Sodium Chloride - 7647-14-5	RG 78

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents

at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Ethylenediamine tetraacetic acid - 60-00-4	75.	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Sodium Chloride - 7647-14-5	Plant protection agent
Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Sodium Chloride - 7647-14-5	Product-type 1: Human hygiene

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIOC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL
Ceiling	Maximum limit value	*
+	Sensitizers	

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) STEL (Short Term Exposure Limit) Skin designation

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC) European Chemicals Agency (ECHA) (ECHA API) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization Prepared by Environmental, Health and Safety **Revision note** SDS is valid 3 years from revision date. Contact info@neb.com for latest revision.

Revision date 06-May-2023

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

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End of Safety Data Sheet