

# 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

Revision date 06-May-2023 Version 9

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

1.1. Product identifier

Product No R0711

Product name NmeAIII

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 safety data sheet

**Supplier Address** 

New England BioLabs 240 County Road Ipswich, MA 01938 USA

For further information, please contact

**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]

EUH210 - Safety data sheet available on request

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

The product contains no substances which at their given concentration, are considered to be hazardous to health

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	1 - 5	No data available	231-598-3	No data available	-	-	-
Chloride							
7647-14-5							

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

**Acute Toxicity Estimate** 

No information available

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg		Inhalation LC50 - 4 hour - vapor - mg/L	
Sodium Chloride 7647-14-5	3000	10000	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 aid measures

**Inhalation** Remove to fresh air.

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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 needed

## SECTION 5: Firefighting measures

5.1. Extinguishing media

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 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.

6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

6.3. Methods and material for containment 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, including 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

**Exposure Limits** 

This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

	Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Ī	Sodium Chloride	-	-	-	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
	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
Glycerol 56-81-5	-	-	56 mg/m <sup>3</sup> [5] [6]
Sodium Chloride 7647-14-5	-	295.52 mg/kg bw/day [4] [6] 295.52 mg/kg bw/day [4] [7]	2068.62 mg/m <sup>3</sup> [4] [6] 2068.62 mg/m <sup>3</sup> [4] [7]
Tris-HCl 1185-53-1	-	216.6 mg/kg bw/day [4] [6]	152.8 mg/m³ [4] [6]
Ethylenediamine tetraacetic acid 60-00-4	-	-	1.5 mg/m³ [5] [6] 3 mg/m³ [5] [7]

#### **Notes**

[4] Systemic health effects.[5] Local health effects.

[6] Long term. Short term.

## Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Glycerol	229 mg/kg bw/day [4] [6]	-	33 mg/m³ [5] [6]
56-81-5			
Sodium Chloride	126.65 mg/kg bw/day [4] [6]	126.65 mg/kg bw/day [4] [6]	443.28 mg/m <sup>3</sup> [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 <sup>3</sup> [4] [7]
Tris-HCI	10.8 mg/kg bw/day [4] [6]	-	37.7 mg/m <sup>3</sup> [4] [6]
1185-53-1			
Ethylenediamine tetraacetic acid	25 mg/kg bw/day [4] [6]	-	0.6 mg/m³ [5] [6]
60-00-4			1.2 mg/m³ [5] [7]

**Notes** 

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

Short term.

## **Predicted No Effect Concentration (PNEC)**

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Glycerol 56-81-5	0.885 mg/L	8.85 mg/L	0.0885 mg/L	-	-
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
Glycerol 56-81-5	3.3 mg/kg sediment dw	0.33 mg/kg sediment dw	1000 mg/L	0.141 mg/kg soil dw	-
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

**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. exceeded or irritation is experienced, ventilation and evacuation may be required.

None known

**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 properties

Physical state Liquid Appearance Colorless

**Color** No information available

Odor Mild.

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing point No data available None known Initial boiling point and boiling rangeNo data available 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 392.78 °C

Decomposition temperature

No data available None known No data available None known pH (as aqueous solution) No data available Kinematic viscosity 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 No data available Vapor pressure None known No data available Relative density 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 impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

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 products

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)
 21,965.20 mg/kg

 ATEmix (dermal)
 19,322.50 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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Chloride	= 3 g/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat)1 h

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

**Skin corrosion/irritation**No information available.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitization** 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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

11.2.2. Other information

Other adverse effects No information available.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

# Ecotoxicity

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Sodium Chloride	-	LC50: 5560 - 6080mg/L	-	EC50: =1000mg/L (48h,
		(96h, Lepomis		Daphnia magna)
		macrochirus)		EC50: 340.7 - 469.2mg/L
		LC50: =12946mg/L (96h,		(48h, Daphnia magna)
		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)	

### 12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** 

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

Dispose of in accordance with local regulations. Dispose of waste in accordance with

#### 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

environmental legislation.

products

Contaminated packaging Do not reuse empty containers.

## **SECTION 14: Transport information**

<u>IATA</u>

14.1 UN number or ID number Not regulated 14.2 Extended Proper Shipping Not regulated

Name

14.3 Transport hazard class(es) Not regulated 14.4 Packing group Not regulated14.5 Environmental hazard Not applicable

14.6 Special precautions for user

Special Provisions None

**IMDG** 

14.1 UN number or ID number14.2 Extended Proper ShippingNot regulatedNot regulated

Name

14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazard
 Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

14.7 Maritime transport in bulk No information available according to IMO instruments

RID

14.1 UN/ID No Not regulated14.2 Extended Proper Shipping Not regulated

Name

14.3 Transport hazard class(es)
 14.4 Packing group
 14.5 Environmental hazard
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

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
 Not regulated Not regulated Not applicable

14.6 Special precautions for user

Special Provisions None

# **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 does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

## **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** 

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

#### 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 STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

+ 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)

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** 

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