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Revision date 06-Jun-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 1

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

<u>1.1. Product identifier</u>	
Product No	B8534
Product name	Diluent C (with rAlbumin)
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]					
<u>2.2. Label elements</u> This mixture is classified as not hazar	rdous according to regulation (EC) 1272/2008 [CLP]				
Hazard statements This mixture is classified as not hazar EUH210 - Safety data sheet available	rdous 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.					

SECTION 3: Composition/information on ingredients

3.1 Substances

Endocrine Disruptor Information

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							

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

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	Inhalation LC50 - 4	Inhalation LC50 - 4
			hour - dust/mist -	hour - vapor - mg/L	hour - gas - ppm
			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.

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.
<u>4.2. Most important symptoms and</u> Symptoms	<u>effects, both acute and delayed</u> 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 th	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-fightersFirefighters 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 equ	ipment 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, 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
Sodium Chloride	-	-	-	TWA: 5 mg/m ³	TWA: 5 mg/m ³
7647-14-5					-

Biological occupational exposure 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/m³ [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 ³ [4] [6] 2068.62 mg/m ³ [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] [5]	Systemic health effects. Local health effects.
[6]	Long term.
[7]	Short term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Glycerol 56-81-5	229 mg/kg bw/day [4] [6]	-	33 mg/m³ [5] [6]
Sodium Chloride 7647-14-5	126.65 mg/kg bw/day [4] [6] 126.65 mg/kg bw/day [4] [7]	126.65 mg/kg bw/day [4] [6] 126.65 mg/kg bw/day [4] [7]	443.28 mg/m ³ [4] [6] 443.28 mg/m ³ [4] [7]
Tris-HCI 1185-53-1	10.8 mg/kg bw/day [4] [6]	-	37.7 mg/m ³ [4] [6]
Ethylenediamine tetraacetic acid 60-00-4	25 mg/kg bw/day [4] [6]	-	0.6 mg/m³ [5] [6] 1.2 mg/m³ [5] [7]

Notes

[4]	Systemic health effects.
[5]	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
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.

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 a	nd chemical properties	
Physical state	Liquid	
Appearance	Colorless	
Color	No information available	
Odor	Mild.	
Odor threshold	No information available	
Property	<u>Values</u>	Remarks • Method
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang	e No 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		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 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)	22,380.10	mg/kg
ATEmix (dermal)	19,417.50	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 v	well as chronic effects from	n 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	<u>8_</u>		
11.2.1. Endocrine disrupting prope	erties		
Endocrine disrupting properties	No information available.		
11.2.2. Other information			
Other adverse effects	No information available.		
SECTION 12: Ecological ir	nformation		

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 microorganisms	Crustacea
Sodium Chloride	-	LC50: 5560 - 6080mg/L (96h, Lepomis macrochirus) LC50: =12946mg/L (96h, Lepomis macrochirus) LC50: 6020 - 7070mg/L		EC50: =1000mg/L (48h, Daphnia magna) EC50: 340.7 - 469.2mg/L (48h, Daphnia magna)

(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	

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 products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

SECTION 14: Transport information

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

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:

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
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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 Sectior TWA Ceiling +	n 8: EXPOSURE CONTROLS/PERSONAL PF TWA (time-weighted average) Maximum limit value Sensitizers	ROTECTION STEL *	STEL (Short Term Exposure Limit) Skin designation
Agency for Toxic U.S. Environmen European Food S European Chemic European Chemic EPA (Environmen Acute Exposure C U.S. Environmen U.S. Environmen Food Research J Hazardous Subst International Unif National Institute Australia National NIOSH (National National Library C		ssment (ECHA_RAC gicide, and Rodentic Chemicals	side Act

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.
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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