# SAFETY DATA SHEET



**Document Type** EGHS - Europe GHS

Revision date 27-Jun-2016

Version 3

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name NEB Stable Competent E.coli (High Efficiency)

Product No C3040

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

Company Phone Number 978-927-5054

800-632-5227 (toll free)

**Telefax** 978-921-1350

For further information, please contact

E-mail address info@neb.com

1.4. Emergency telephone number

Emergency telephone 978-927-5054

800-632-5227 (toll free)

9:00am - 5:00pm Monday-Friday EST

Emergency telephone - §45 - (EC)1272/2008 Europe 112

# **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 [GHS]

#### 2.2. Label elements

**Product identifier** 

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

# Signal word

None

EUH210 - Safety data sheet available on request

#### 2.3. Other hazards

Other hazards

Per Centers for Disease Control and Prevention (CDC) Guidelines (Biosafety in Microbiological and Biomedical Laboratories, 5th Edition), this material can be handled at Biological Safety Level One (BSL-1) containment.

Biological Safety Level One (BSL-1) containment, using standard microbiological practices, is suitable for work involving well-characterized microbiological organisms not known to consistently cause disease in immunocompetent adult humans, and present minimal potential hazard to laboratory personnel and the environment.

# Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

# 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical Name	EC No	CAS No	Weight-%	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration No.
Trade Secret	Listed	-	1 - 5	-	No data available	No data available
Trade Secret	Listed	-	1 - 5	Xi; R36	Eye Irrit. 2 (H319)	No data available

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

# **Section 4: FIRST AID MEASURES**

# 4.1. Description of first aid measures

#### **General advice**

Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove from exposure, lie down. Do not breathe dust/fume/gas/mist/vapors/spray.

#### **Eve 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.

# Inhalation

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Remove to fresh air.

# Ingestion

Clean mouth with water and drink afterwards plenty of water.

# 4.2. Most important symptoms and effects, both acute and delayed

No information available

#### 4.3. Indication of any immediate medical attention and special treatment needed

# Note to physicians

Treat symptomatically.

# **Section 5: FIRE FIGHTING MEASURES**

#### 5.1. Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

#### 5.2. Special hazards arising from the substance or mixture

No information available

# 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# Section 6: ACCIDENTAL RELEASE MEASURES

# 6.1. Personal precautions, protective equipment and emergency procedures

#### **Personal precautions**

Ensure adequate ventilation, especially in confined areas.

# For emergency responders

Use personal protection recommended in Section 8.

#### 6.2. 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

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. This material and its container must be disposed of as hazardous waste.

# Section 7: HANDLING AND STORAGE

# 7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage temperature

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Refer to www.neb.com for specific information.

# **Storage Conditions**

Keep/store only in original container.

# Incompatible materials

None known based on information supplied.

#### 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** 

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Trade Secret	=	-	-	-	TWA: 50 ppm
					TWA: 160 mg/m <sup>3</sup>
					Ceiling / Peak: 100
					ppm
					Ceiling / Peak: 320
					mg/m³
					Skin
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Trade Secret	-	-	=	TWA: 50 ppm	TWA: 50 ppm
				Skin	TWA: 160 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Trade Secret	Skin	Skin	-	-	-
	TWA: 50 ppm	STEL: 100 ppm			
	TWA: 160 mg/m <sup>3</sup>	STEL: 320 mg/m <sup>3</sup>			
		TWA: 50 ppm			
		TWA: 160 mg/m <sup>3</sup>			

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No information available (PNEC)

8.2. Exposure controls

# **Engineering controls**

Showers. Eyewash stations.

# Individual protection measures, such as personal protective equipment

# Eye/face protection

Wear safety glasses with side shields (or goggles).

#### Skin and body protection

Wear suitable protective clothing and gloves.

#### Respiratory protection

Use in well ventilated areas.

# **General hygiene considerations**

Handle in accordance with good industrial hygiene and safety practice.

#### **Environmental exposure controls**

See Section 12: ECOLOGICAL INFORMATION.

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# **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

# Information on basic physical and chemical properties

Physical state Liquid
Appearance Colorless
Odor None

Odor threshold No information available

Property Remarks • Method

**pH** 7.5

Melting point / freezing point

Boiling point / boiling range

Flash point

Evaporation rate

Flammability (solid, gas)

Flammability Limit in Air

No information available

Upper flammability limit

Lower flammability limit Vapor pressure No information available Vapor density No information available No information available Relative density No information available Specific gravity No information available Water solubility Solubility in other solvents No information available Partition coefficient No information available **Autoignition temperature** No information available **Decomposition temperature** No information available Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive properties** No information available **Oxidizing properties** No information available

Other information

Softening pointNo information availableMolecular weightNo information availableVOC content (%)No information availableDensityNo information availableBulk densityNo information available

# **Section 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

No data available.

# 10.2. Chemical stability

Stable under normal conditions.

# 10.3. Possibility of hazardous reactions

Can react briskly with oxidizers - danger of explosion.

# 10.4. Conditions to avoid

Incompatible materials. Ignition sources. Heat.

# 10.5. Incompatible materials

Strong oxidizing agents.

# 10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2).

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# **Section 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on toxicological effects

# **Acute toxicity**

#### **Product information**

Product does not present an acute toxicity hazard based on known or supplied information.

#### Inhalation

Avoid breathing vapors or mists May cause irritation of respiratory tract

#### Eye contact

Redness

May cause slight irritation

#### Skin contact

Prolonged contact may cause redness and irritation Repeated exposure may cause skin dryness or cracking

#### Ingestion

May cause drowsiness or dizziness

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting

Unknown acute toxicity 13 % of the mixture consists of ingredient(s) of unknown toxicity

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

 ATEmix (oral)
 48,144.00 mg/kg

 ATEmix (dermal)
 67,287.00 mg/kg

 ATEmix (inhalation-vapor)
 5,700.00 mg/l

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg (Rat)	-	-
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³ (Rat) 1 h
Trade Secret	= 14500 mg/kg (Rat)	= 40 g/kg (Rat)	-
Trade Secret	= 1000 mg/kg (Rat)	= 2630 mg/kg (Rat)	-
Trade Secret	= 250 mg/kg ( Rat )	-	-
Trade Secret	= 3250 mg/kg ( Rat )	-	-

Skin corrosion/irritation Mild Serious eye damage/eye irritation Mild

Sensitization Not applicable
Germ cell mutagenicity Not applicable

Carcinogenicity No information available

Reproductive toxicity
Developmental toxicity
Teratogenicity
STOT - single exposure
STOT - repeated exposure
Neurological effects
No information available
No information available
No information available
No information available

Target organ effects Blood, Central nervous system, Eyes, Kidneys, Respiratory system, Skin.

Other adverse effects
Symptoms
No information available
No information available
No information available

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# **Section 12: ECOLOGICAL INFORMATION**

# 12.1. Toxicity

0.72 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Trade Secret	12350 - 25500: 96 h Skeletonema	34000: 96 h Pimephales promelas	7000: 24 h Daphnia species mg/L
	costatum mg/L EC50	mg/L LC50 40: 96 h Lepomis	EC50
		macrochirus g/L LC50 static 33 - 37:	
		96 h Oncorhynchus mykiss g/L	
		LC50 static 41.7: 96 h Cyprinus	
		carpio g/L LC50	
Trade Secret	-	10650: 96 h Lepomis macrochirus	2400: 48 h Daphnia magna mg/L
		mg/L LC50 static	LC50

#### 12.2. Persistence and degradability

No information available

# 12.3. Bioaccumulative potential

No information available

Chemical Name	Partition coefficient	
Trade Secret	-2.03	

# 12.4. Mobility in soil

No information available

# 12.5. Results of PBT and vPvB assessment

No information available

# 12.6. Other adverse effects

# Other adverse effects

No information available

# **Endocrine disruptor information**

No information available

# Ozone

No information available

# **Section 13: DISPOSAL CONSIDERATIONS**

# 13.1. Waste treatment methods

# **Relevant Information**

Keep out of drains, sewers, ditches and waterways.

# **Waste from Residues/Unused Products**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Send to a licensed recycler, reclaimer or incinerator.

# **Contaminated packaging**

Empty containers must be tripled rinsed prior to disposal.

# **Section 14: TRANSPORT INFORMATION**

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#### IMDG

14.1 UN/ID No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	Not applicable

14.6 Special Provisions None

14.7 Transport in bulk according to No information available

Annex II of MARPOL 73/78 and the

**IBC Code** 

# RID

14.1 UN/ID No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None
14.5 Environmental hazard	Not applicable

# ADR

14.1 UN/ID No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

# ICAO (air)

14.1 UN/ID No	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Hazard class	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

# <u>IATA</u>

14.1	UN/ID No	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard class	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazard	Not applicable
146	Special Provisions	None

# **Section 15: REGULATORY INFORMATION**

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

# **National Regulations**

Occupational Illnesses (R-463-3, France)

Chemical Name		French RG number	Title
Trade Secret		RG 84	-

# **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

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#### **International Inventories**

All of the components in the product are on the following Inventory lists TSCA (United States):, Canada (DSL/NDSL), Europe (EINECS/ELINCS), Australia (AICS).

TSCA Complies
EINECS Complies
ELINCS -

ELINCS DSL NDSL PICCS ENCS IECSC -

**AICS** Complies

KECL -

#### Legend

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

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

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances AICS - Australian Inventory of Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

# 15.2. Chemical safety assessment

No information available

# Section 16: OTHER INFORMATION

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

# Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

Prepared by EH&S Manager

978-927-5054

Prepared by New England BioLabs Issue date No data available

**Revision note** SDS is valid 3 years from revision date. Contact info@neb.com for latest revision.

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

# **Disclaimer**

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**End of Safety Data Sheet**