

Document Type EGHS - Europe  
GHS

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Version 1

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

### 1.1. Product identifier

Product name **T7 Express Competent E.coli (High efficiency)**  
Product No **C2566**

### 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]

### Classification according to 67/548/EEC

Full text of R-phrases: see section 16

### Hazard symbols

Not dangerous

### 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.

No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

### 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 Number
Glycerol	Present	56-81-5	1-10	-	No data available	No data available
Trade Secret	Listed	-	0 - 10%	-	No data available	No data available
Trade Secret	Listed	-	0 - 10%	-	No data available	No data available

Full text of R-phrases: see section 16

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.

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Specification No No information available

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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.

**Inhalation**

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

Refer to [www.neb.com](http://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

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Glycerol 56-81-5	-	STEL: 30 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 50 mg/m <sup>3</sup> Ceiling / Peak: 100 mg/m <sup>3</sup>
Trade Secret	-	-	-	-	TWA: 50 ppm TWA: 160 mg/m <sup>3</sup> Ceiling / Peak: 100 ppm Ceiling / Peak: 320 mg/m <sup>3</sup> Skin
Trade Secret	-	TWA: 0.5 mg/m <sup>3</sup>	-	TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.02 mg/m <sup>3</sup> Ceiling / Peak: 1.6 mg/m <sup>3</sup> Ceiling / Peak: 0.16 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Glycerol 56-81-5	-	TWA: 10 mg/m <sup>3</sup>	-	TWA: 20 mg/m <sup>3</sup>	-
Trade Secret	-	-	-	TWA: 50 ppm Skin	TWA: 50 ppm TWA: 160 mg/m <sup>3</sup>
Trade Secret	-	TWA: 0.2 mg/m <sup>3</sup>	-	TWA: 0.2 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Glycerol 56-81-5	-	STEL: 100 mg/m <sup>3</sup> TWA: 50 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 10 mg/m <sup>3</sup>
Trade Secret	Skin TWA: 50 ppm TWA: 160 mg/m <sup>3</sup>	Skin STEL: 100 ppm STEL: 320 mg/m <sup>3</sup> TWA: 50 ppm TWA: 160 mg/m <sup>3</sup>	-	-	-
Trade Secret	STEL 2 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> STEL: 3 ppm STEL: 0.3 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available

## **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.

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

### **Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Colorless
<b>Odor</b>	None
<b>Odor threshold</b>	No information available

<b><u>Property</u></b>		<b><u>Remarks • Method</u></b>
<b>pH</b>	6.6	
<b>Melting point/freezing point</b>		No information available
<b>Boiling point / boiling range</b>		No information available
<b>Flash point</b>		No information available
<b>Evaporation rate</b>		No information available
<b>Flammability (solid, gas)</b>		No information available
<b>Flammability Limit in Air</b>		No information available
<b>Upper flammability limit</b>		
<b>Lower flammability limit</b>		
<b>Vapor pressure</b>		No information available
<b>Vapor density</b>		No information available
<b>Relative density</b>		No information available
<b>Specific gravity</b>		No information available
<b>Water solubility</b>		No information available
<b>Solubility in other solvents</b>		No information available
<b>Partition coefficient</b>		No information available
<b>Autoignition temperature</b>		No information available
<b>Decomposition temperature</b>		No information available
<b>Kinematic viscosity</b>		No information available
<b>Dynamic viscosity</b>		No information available
<b>Explosive properties</b>		No information available
<b>Oxidizing properties</b>		No information available

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**Other information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC content (%)</b>	No information available
<b>Density</b>	No information available
<b>Bulk density</b>	No 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 (CO<sub>2</sub>).

**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 causes burns of the upper digestive and respiratory tracts  
Symptoms include burning sensation, coughing, wheezing, shortness of breath, headache, nausea, and vomiting

**Unknown acute toxicity**                      0.32% of the mixture consists of ingredient(s) of unknown toxicity

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

<b>ATEmix (oral)</b>	17,742.00 mg/kg
<b>ATEmix (dermal)</b>	85,106.00 mg/kg
<b>ATEmix (inhalation-vapor)</b>	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/m <sup>3</sup> ( Rat ) 1 h
Trade Secret	= 14500 mg/kg ( Rat )	= 40 g/kg ( Rat )	-
Trade Secret	= 250 mg/kg ( Rat )	-	-
Trade Secret	= 1000 mg/kg ( Rat )	= 2630 mg/kg ( Rat )	-
Trade Secret	= 2600 mg/kg ( Rat )	-	-

<b>Skin corrosion/irritation</b>	Mild
<b>Serious eye damage/eye irritation</b>	Mild
<b>Sensitization</b>	Mild
<b>Germ cell mutagenicity</b>	Mild
<b>Carcinogenicity</b>	No information available
<b>Reproductive toxicity</b>	No information available
<b>Developmental toxicity</b>	No information available
<b>Teratogenicity</b>	No information available
<b>STOT - single exposure</b>	No information available
<b>STOT - repeated exposure</b>	No information available
<b>Neurological effects</b>	No information available
<b>Target organ effects</b>	Blood, Central nervous system, Eyes, Kidneys, Respiratory system, Skin.
<b>Other adverse effects</b>	No information available
<b>Symptoms</b>	No information available
<b>Aspiration hazard</b>	No information available

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

1.41% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Glycerol	-	51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static	500: 24 h Daphnia magna mg/L EC50
Trade Secret	12350 - 25500: 96 h Skeletonema costatum mg/L EC50	34000: 96 h Pimephales promelas mg/L LC50 33 - 37: 96 h Oncorhynchus mykiss g/L LC50 static 40: 96 h Lepomis macrochirus g/L LC50 static 41.7: 96 h Cyprinus carpio g/L LC50	7000: 24 h Daphnia species mg/L EC50

### 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

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**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

### 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 Annex II of MARPOL 73/78 and the IBC Code	No information available

### 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

### 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

**IATA**

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

**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

**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 -  
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**

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Specification No No information available

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**Full text of R-phrases referred to under sections 2 and 3**

R22 - Harmful if swallowed

**Prepared by** EHS Manager  
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**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**