

Document Type WPNA - Canada and Mexico

Revision date 21-Apr-2015

Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product name** Solution A (minus aa, tRNA)  
**Product No** B6841

### Recommended use of the chemical and restrictions on use

**Recommended use** This product is for research and development only

**Uses advised against** No information available

### 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

**E-mail address** info@neb.com

### Emergency telephone number

**Emergency telephone** 978-927-5054  
800-632-5227 (toll free)  
9:00am - 5:00pm Monday-Friday EST

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health  
For a list of product substances, refer to the specification document found at [www.neb.com](http://www.neb.com).

**Appearance** Colorless

**Physical state** Liquid

**Odor** Mild

### Principle Routes of Exposure

#### Acute toxicity

##### Inhalation

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.

##### Eyes

Redness. May cause slight irritation.

##### Skin

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.

### Chronic Effects

#### Chronic toxicity

No information available

#### Symptoms

No information available.

#### Aggravated Medical Conditions

None known.

#### Interactions with Other Chemicals

No information available

### Environmental hazard

See Section 12: ECOLOGICAL INFORMATION

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	30-60
Trade Secret	Proprietary	15-40
Trade Secret	Proprietary	7-13
Trade Secret	Proprietary	3-7
Trade Secret	Proprietary	1-5
Trade Secret	Proprietary	1-5
Trade Secret	Proprietary	0.1-1
Trade Secret	Proprietary	0.1-1
Trade Secret	Proprietary	0.1-1
Trade Secret	Proprietary	0.1-1
Trade Secret	Proprietary	0.1-1
Trade Secret	Proprietary	<0.1

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

## 4. 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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**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.

## 5. FIRE-FIGHTING MEASURES

**Suitable 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.

**Specific hazards arising from the product**

No information available

**Protective equipment and precautions for firefighters**

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

**NFPA**

Health hazards 0

Flammability 0

Stability 0

Special Hazard -

**HMIS**

Health hazards 0

Flammability 0

Physical hazards 0

Personal protection -

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment [PPE]**

Use personal protection recommended in Section 8.

**Environmental precautions**

See Section 12 for additional ecological information.

**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.

## 7. HANDLING AND STORAGE

**Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice.

**Storage temperature**

Refer to [www.neb.com](http://www.neb.com) for specific information.

**Storage conditions**

Keep/store only in original container.

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**Incompatible materials**

None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering controls**

Showers. Eyewash stations.

**Personal protective equipment (PPE)****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.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Colorless
Odor	Mild

**Property**

pH

Melting point/freezing point

Boiling point / boiling range

Flash point

Evaporation rate

Flammability (solid, gas)

Flammability Limit in Air

Upper flammability limit

Lower flammability limit

Vapor pressure

Vapor density

Relative density

Specific gravity

Water solubility

Solubility in other solvents

Partition coefficient

Autoignition temperature

Decomposition temperature

Kinematic viscosity

Dynamic viscosity

Explosive properties

Oxidizing properties

**Remarks • Method**

Refer to [www.neb.com](http://www.neb.com) for specific information

No information available

No information available

No information available

No information available

No information available

No information available

No information available

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No information available

No information available

No information available

No information available

No information available

No information available

No information available

**Other information**

Softening point

No information available

Molecular weight

No information available

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**Specification No** No information available

VOC content (%)  
Density  
Bulk density

No information available  
No information available  
No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available.

### Stability

Stable under normal conditions.

### Possibility of hazardous reactions

Can react briskly with oxidizers - danger of explosion.

### Conditions to avoid

Incompatible materials, Ignition sources, Heat.

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

### 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.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water	> 90 mL/kg ( Rat )	-	-
Trade Secret	= 7900 mg/kg ( Rat )	-	-
Trade Secret	> 8 g/kg ( Rat )	-	-

### Chronic toxicity

#### **Skin corrosion/irritation**

Mild

#### **Serious eye damage/eye irritation**

Mild

#### **Irritation**

Mild

#### **Corrosivity**

Mild

#### **Sensitization**

##### **Skin**

No information available

##### **Respiratory**

No information available

#### **Germ cell mutagenicity**

No information available

#### **Carcinogenicity**

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>Chronic toxicity</b>	No information available
<b>Subchronic toxicity</b>	No information available
<b>Target organ effects</b>	Kidneys, Respiratory system, Eyes, Skin.
<b>Neurological effects</b>	No information available
<b>Other adverse effects</b>	No information available
<b>Aspiration hazard</b>	No information available

## 12. ECOLOGICAL INFORMATION

**Marine pollutant**  
No information available

**Ecotoxicity**  
No information available

**Persistence and degradability**  
No information available

**Bioaccumulation**  
No information available

**Mobility**  
No information available

**Other adverse effects**  
**Ozone depletion potential (ODP)** No information available

## 13. DISPOSAL CONSIDERATIONS

**Relevant information**  
Keep out of drains, sewers, ditches and waterways.

**Disposal considerations**  
Use a licensed professional waste disposal service to dispose of this product. Product may be dissolved in a combustible solvent or absorbed onto a combustible material and burned by a chemical incinerator.

**Contaminated packaging**  
Empty containers must be tripled rinsed prior to disposal.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

<b>ICAO (air)</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADR</b>	Not regulated
<b>ADN</b>	Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

**TSCA** -  
**DSL** -  
**NDSL** -

Chemical Name	TSCA	DSL	NDSL
Water	Present	X	Not Listed
Trade Secret	Present	X	Not Listed
Trade Secret	Present	X	Not Listed
Trade Secret	Present	X	Not Listed
Trade Secret	Present	X	Not Listed
Trade Secret	Present	X	Not Listed
Trade Secret	Present	Not Listed	X
Trade Secret	Not Listed	Not Listed	X

### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive hazard</b>	No

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### International Regulations

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**Specification No** No information available

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Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

## 16. OTHER INFORMATION

**Prepared by** EHS Manager  
978-927-5054  
info@neb.com

**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

**Disclaimer**

**IMPORTANT:** The information in this SDS is provided in good faith based on our knowledge as of the issue date (or subsequent revision date, if any), and is to be used only as a guide. This SDS does not constitute a guarantee (express or implied) of any kind and we make no warranties or merchantability or fitness for a particular purpose. This information relates only to the designated product as shipped and may not be valid if the product is used in combination with any other materials or is not used in accordance with our instructions. It is the responsibility of the buyer/user to ensure that its activities comply with all applicable governmental requirements. Since conditions of use of the product are not under the control of New England Biolabs, it is the duty of the buyer/user to determine the necessary conditions for the safe use of the product. New England Biolabs will not be liable for any damages resulting from handling or contact with the product.

**End of Safety Data Sheet**