

Safety Data Sheet

PNPP SUBSTRATE

EFFECTIVE DATE: 2017-02-28

1 Product and Company Identification

- 1.1 **Product Name:** pNPP Substrate
- 1.2 **Product Identifier:** Diethanolamine 10%
- 1.3 **Catalog Number:** 01917
- 1.4 **Product Use:** ELISA
- 1.5 **Manufacturer/Supplier:** STEMCELL Technologies
Suite 500-1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada
- 1.6 **In Case of Emergency Call:** 1-800-667-0322

2 Hazards Identification

2.1 Classification of the substance or mixture

Acute Toxicity: Oral, Category 4
 Skin Corrosion/Irritation, Category 2
 Eye Damage/Eye Irritation, Category 2
 Specific Target Organ Toxicity (Repeated Exposure), Category 2

2.2 Label elements

Pictogram



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash ... thoroughly after handling.
 P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 Rinse mouth.
 P302+352 IF ON SKIN: Wash with plenty of soap and water.
 P332+313 If skin irritation occurs: Get medical advice/attention.
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P337+313 If eye irritation persists get medical advice/attention.

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P314 Get Medical advice/attention if you feel unwell.
P362 Take off contaminated clothing and wash before reuse.
2.3 Other hazards No data available

3 Composition / Information on Ingredients

3.1 Mixtures

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
Diethanolamine	111-42-2	10%	203-868-0

4 First Aid Measures

4.1 Description of first aid measures

4.1.1 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.1.2 In case of skin contact

Remove contaminated clothing. Wash off with soap and plenty of water. Consult a physician.

4.1.3 In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

4.1.4 If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do not induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 Fire Fighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

5.1.2 Unsuitable Extinguishing Media

No data available

5.2 Special hazards arising from the substance or mixture

5.2.1 Flammable Properties and Hazards

Not flammable or combustible.

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No data available

5.2.3 Autoignition Pt

No data available

5.2.4 Explosive Limits

LEL: No data available

UEL: No data available

5.2.5 Hazardous Combustion Products

No data available

5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapors, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Collect large spills as chemical waste according to local regulations. Keep in suitable, closed containers for disposal.

7 Handling and Storage**7.1 Precautions for safe handling**

Avoid inhalation of vapour or mist.

For precautions see section 2.2.

7.2 Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

8 Exposure Controls/Personal Protection**8.1 Exposure limits**

Contains no substances with occupational exposure limit values.

8.2 Engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

8.3 Personal protective equipment**8.3.1 Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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8.3.2 Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.3.3 Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

8.3.4 General hygiene considerations

General industrial hygiene practice.

8.3.5 Environmental exposure controls

Do not let product enter drains.

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear to light yellow liquid
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	Soluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10 Stability and Reactivity

10.1 Reactivity	No data available
10.2 Chemical stability	Stable under recommended storage conditions.
10.3 Possibility of hazardous reactions	No data available

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10.4 Conditions to avoid	Elevated temperature and light may cause yellow color formation.
10.5 Incompatible materials	Strong acids, strong oxidizing agents and metals may cause yellow color formation.
10.6 Hazardous decomposition products	No data available

11 Toxicological Information**11.1 Acute toxicity**

Oral:	Nausea and stomach pain may occur on ingestion.
Inhalation:	No data available
Dermal:	No data available
Other:	Diethanolamine has been reported to be slightly toxic in mice, rats and rabbits.

11.2 Skin corrosion/irritation

May cause irritation and redness.

11.3 Serious eye damage/eye irritation

May cause irritation and redness.

11.4 Respiratory and/or skin sensitization

May cause irritation and redness.

11.5 Germ cell mutagenicity

No data available

11.6 Carcinogenicity

No data available

11.7 Reproductive toxicity

No data available

11.8 Specific target organ toxicity - single exposure

No data available

11.9 Specific target organ toxicity - repeated exposure

No data available

11.10 Aspiration hazard

No data available

11.11 Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: Harmful if swallowed.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes serious eye irritation.

11.12 Signs and symptoms of exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence (Sulfuric acid)

11.13 RTECS # No data available

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12 Ecological Information

12.1 Toxicity	No data available
12.2 Persistence and degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Other adverse effects	No data available

13 Disposal Considerations

- 13.1 Waste disposal method**
 Offer surplus and non-recyclable solutions to a licensed disposal company.
- 13.2 Contaminated packaging**
 Dispose of as unused product.

14 Transport Information

14.1 UN number	No data available	
14.2 UN proper shipping name	DOT	Not dangerous goods
	ADR/RID	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	Not dangerous goods
14.3 Transport hazard class(es)	No data available	
14.4 Packing group	No data available	
14.5 Environmental hazards	No data available	
14.6 Special precautions	No data available	

15 Regulatory Information

15.1 USA

SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

The following components are subject to reporting levels established by SARA Title III, Section 313:

Component	CAS #	Revision Date
Diethanolamine	111-42-2	2011-07-01

SARA 311/312:

No data available

Massachusetts Right To Know Components

Component	CAS #	Revision Date
Diethanolamine	111-42-2	2011-07-01

Safety Data Sheet**PNPP SUBSTRATE****EFFECTIVE DATE: 2017-02-28****Pennsylvania Right To Know Components**

Component	CAS #	Revision Date
Diethanolamine	111-42-2	2011-07-01
Water	7732-18-5	

New Jersey Right To Know Components

Component	CAS #	Revision Date
Diethanolamine	111-42-2	2011-07-01

California Prop. 65 Components

No data available

15.2 EU

This SDS was prepared in accordance with Regulation (EC) No.1272/2008.

15.3 Canada

Not WHMIS controlled

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

16 Other Information**16.1 Prepared by:** Quality Control, STEMCELL Technologies Inc.**16.2 Revision:** 1_0_0**16.3 Notice:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.**16.4 Disclaimer:** **THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.**