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A Geno Technology, Inc. (USA) brand name

# Safety Data Sheet

Cat. # 786-453

## Phosphatase Assay kit

Size: 1,000 Assays



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# PA Buffer

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/20/2016

Revision date: 05/11/2017

Version: 7.1

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixture  
Product name : PA Buffer  
Product code : 003P

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Geno Technology, Inc./ G-Biosciences  
9800 Page Avenue  
Saint Louis, 63132-1429 - United States  
T 800-628-7730 - F 314-991-1504  
[technical@GBiosciences.com](mailto:technical@GBiosciences.com) - [www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.4. Emergency telephone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
First-aid measures after skin contact : Wash skin with plenty of water.  
First-aid measures after eye contact : Rinse eyes with water as a precaution.  
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

No additional information available

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### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### PA Buffer

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Color : No data available

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Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Waste treatment methods : Waste treatment methods.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT

Not applicable

#### Transportation of Dangerous Goods

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

No additional information available

#### 15.2. International regulations

##### CANADA

##### EU-Regulations

##### National regulations

No additional information available

#### 15.3. US State regulations

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### SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 05/11/2017

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*



# Phosphatase Assay Substrate

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/24/2016

Revision date: 05/11/2017

Version: 7.1

### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
Substance name : Phosphatase Assay Substrate  
Product code : 005P

#### 1.2. Recommended use and restrictions on use

No additional information available

#### 1.3. Supplier

Geno Technology, Inc./ G-Biosciences  
9800 Page Avenue  
Saint Louis, 63132-1429 - United States  
T 800-628-7730 - F 314-991-1504  
[technical@GBiosciences.com](mailto:technical@GBiosciences.com) - [www.GBiosciences.com](http://www.GBiosciences.com)

#### 1.4. Emergency telephone number

Emergency number : Chemtrec **1-800-424-9300** (USA/Canada), **+1-703-527-3887** (Intl)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Name : Phosphatase Assay Substrate

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Deionized water		(CAS-No.) 7732-18-5	0.08 - 0.8	Not classified

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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Diethanolamine	2,2'-aminodiethanol, conc>85%, aqueous solutions / 2,2'-dihydroxydiethylamine, conc>85%, aqueous solutions / 2,2'-imino-bis(ethanol), conc>85%, aqueous solutions / 2,2'-iminobis-ethanol, conc>85%, aqueous solutions / 2,2'-iminodiethanol, conc>85%, aqueous solutions / amine, diethyl, 2,2'-dihydroxy-, conc>85%, aqueous solutions / aminodiethanol, conc>85%, aqueous solutions / beta,beta'-dihydroxydiethylamine, conc>85%, aqueous solution / bis(2-hydroxyethyl)amine, conc>85%, aqueous solutions / bis(beta-hydroxyethyl)amine, conc>85%, aqueous solutions / bis(hydroxyethyl)amine, conc>85%, aqueous solutions / di(2-hydroxyethyl)amine, conc>85%, aqueous solutions / di-2-hydroxyethylamine, conc>85%, aqueous solutions / diethanolamine, conc>85%, aqueous solutions / diethylamine, conc>85%, aqueous solutions / dihydroxyethylamine, conc>85%, aqueous solutions / diolamine, conc>85%, aqueous solutions / ethanol, 2,2'-iminobis-, conc>85%, aqueous solutions / ethanol, 2,2'-iminodi-, conc>85%, aqueous solutions / iminodiethanol, conc>85%, aqueous solutions / N,N-bis(2-hydroxyethyl)amine, conc>85%, aqueous solutions / N,N-diethanolamine, conc>85%, aqueous solutions	(CAS-No.) 111-42-2	0.007 - 0.26	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE 2, H373
Soy Powder			0.015 - 0.15	Not classified
kathon CG	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)	(CAS-No.) 55965-84-9	0.002 - 0.02	Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
tris(hydroxymethyl)aminomethane	1,1,1-tris(hydroxymethyl)methylamine / 1,3-propanediol, 2-amino-2-(hydroxymethyl)- / 2-amino-2-(hydroxymethyl)-1,3-propanediol / 2-amino-2-(hydroxymethyl)propane-1,3-diol / 2-amino-2-hydroxymethyl-1,3-propanediol / 2-amino-2-hydroxymethylpropanediol / 2-amino-2-methylol-1,3-propanediol / addex-tham / aminotrimethylolmethane / aminotris(hydroxymethyl)methane / methanamine, 1,1,1-tris(hydroxymethyl)- / methylamine, 1,1,1-tris(hydroxymethyl)- / pehanorm / TALATROL / THAM / THAM set / THAM-E / tri(hydroxymethyl)methylamine / trimethylolaminomethane / TRIS / tris (buffering agent) / tris amine buffer / TRIS AMINO / TRIS buffer / TRIS(base) / tris(hydroxymethyl)methanamine / tris(hydroxymethyl)methylamine / trisamin / trisamine / trisaminol / tris-hydroxymethylaminomethan / tris-hydroxymethylaminomethane / TRISPUFFER / TRIS-STERIL / TRIZMA / trometamol / trometamole / tromethamine / TROMETHANE / tromethanmin / tutofusin TRIS	(CAS-No.) 77-86-1	0.002 - 0.02	Not classified



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Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
hydrogen chloride, conc=36%, aqueous solution (Note B)	hydrochloric acid, conc=37%, aqueous solution	(CAS-No.) 7647-01-0	0.0001 - 0.02	Skin Corr. 1A, H314 STOT SE 3, H335
sodium hydroxide	anhydrous caustic soda / B751 / caustic alkali / caustic flake / caustic flakes / caustic soda / caustic soda, bead / caustic soda, dry / caustic soda, flake / caustic soda, granular / caustic soda, lye / caustic soda, solid / caustic white / caustic, flaked / hydrate of soda / hydrate of sodium / hydroxide of soda / hydroxide of sodium / LEWIS red devil lye / lye (=sodium hydroxide) / soda lye / soda, caustic / soda, hydrate / sodium hydrate / sodium hydrate lye / sodium hydroxide / sodium hydroxide (Na(OH)) / sodium hydroxide, bead / sodium hydroxide, dry / sodium hydroxide, flake / sodium hydroxide, granular / sodium hydroxide, pellets / sodium hydroxide, solid / white caustic	(CAS-No.) 1310-73-2	0.001 - 0.01	Met. Corr. 1, H290 Skin Corr. 1, H314 Aquatic Acute 3, H402

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after skin contact : May cause an allergic skin reaction.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

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### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

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

Storage conditions : Store in a well-ventilated place. Keep cool.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Phosphatase Assay Substrate</b>	
No additional information available	
<b>kathon CG (55965-84-9)</b>	
No additional information available	
<b>sodium hydroxide (1310-73-2)</b>	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH Ceiling (mg/m³)	2 mg/m³
<b>Deionized water (7732-18-5)</b>	
No additional information available	
<b>Soy Powder</b>	
No additional information available	
<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
No additional information available	
<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
No additional information available	
<b>Diethanolamine (111-42-2)</b>	
No additional information available	

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

# Phosphatase Assay Substrate

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In case of insufficient ventilation, wear suitable respiratory equipment

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: No data available
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### kathon CG (55965-84-9)

LD50 oral rat	> 2000 mg/kg (Rat)
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<b>kathon CG (55965-84-9)</b>	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
LD50 oral rat	> 5000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 5000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)

<b>Diethanolamine (111-42-2)</b>	
LD50 oral rat	> 710 mg/kg (Rat, Oral)
ATE US (oral)	500 mg/kg body weight

Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Not classified  
Respiratory or skin sensitization : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : Not classified

<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Not classified

<b>Diethanolamine (111-42-2)</b>	
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified  
Viscosity, kinematic : No data available  
Symptoms/effects after skin contact : May cause an allergic skin reaction.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>sodium hydroxide (1310-73-2)</b>	
LC50 fish 1	45.4 mg/l (96 h, Salmo gairdneri, Static system, Fresh water, Experimental value, Solution >=50%)
EC50 Daphnia 1	40.4 mg/l (48 h, Ceriodaphnia sp., Experimental value, Nominal concentration)

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
EC50 Daphnia 1	> 980 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
LC50 fish 1	282 mg/l (96 h, Gambusia affinis, Pure substance)
EC50 Daphnia 1	< 56 mg/l (72 h, Daphnia magna, Pure substance)

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<b>Diethanolamine (111-42-2)</b>	
LC50 fish 1	1664 mg/l (96 h, Pimephales promelas, Pure substance)
EC50 Daphnia 1	55 mg/l (48 h, Daphnia magna, Pure substance)

### 12.2. Persistence and degradability

<b>kathon CG (55965-84-9)</b>	
Persistence and degradability	Contains non readily biodegradable component(s).

<b>sodium hydroxide (1310-73-2)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Persistence and degradability	Readily biodegradable in water.

<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>Diethanolamine (111-42-2)</b>	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.22 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.52 g O <sub>2</sub> /g substance
ThOD	2.13 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.1

### 12.3. Bioaccumulative potential

<b>kathon CG (55965-84-9)</b>	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

<b>sodium hydroxide (1310-73-2)</b>	
Bioaccumulative potential	Not bioaccumulative.

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Log Pow	-2.31 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
Log Pow	0.25 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>Diethanolamine (111-42-2)</b>	
Log Pow	-2.18 - -1.43
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

<b>kathon CG (55965-84-9)</b>	
Ecology - soil	No (test)data on mobility of the components available.

<b>sodium hydroxide (1310-73-2)</b>	
Ecology - soil	No (test)data on mobility of the substance available.

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Log Koc	1.87 (log Koc, QSAR)
Ecology - soil	Highly mobile in soil.

<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
Ecology - soil	No (test)data on mobility of the components available. May be harmful to plant growth, blooming and fruit formation.

# Phosphatase Assay Substrate

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<b>Diethanolamine (111-42-2)</b>	
Ecology - soil	No (test)data on mobility of the components available.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Waste treatment methods.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not applicable

### Transportation of Dangerous Goods

Not applicable

### Transport by sea

Not applicable

### Air transport

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>Phosphatase Assay Substrate</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>kathon CG (55965-84-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>sodium hydroxide (1310-73-2)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	1000 lb
<b>Deionized water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Soy Powder</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>hydrogen chloride, conc=36%, aqueous solution (7647-01-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Not subject to reporting requirements of the United States SARA Section 313	
Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

# Phosphatase Assay Substrate

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Diethanolamine (111-42-2)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory  
Subject to reporting requirements of United States SARA Section 313

CERCLA RQ

100 lb

## 15.2. International regulations

### CANADA

#### Deionized water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

#### tris(hydroxymethyl)aminomethane (77-86-1)

Listed on the Canadian DSL (Domestic Substances List)

#### hydrogen chloride, conc=36%, aqueous solution (7647-01-0)

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

### National regulations

#### Diethanolamine (111-42-2)

Listed on IARC (International Agency for Research on Cancer)

## 15.3. US State regulations

### Diethanolamine (111-42-2)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

## SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 05/11/2017

Full text of H-phrases:

H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*