

Safety Data Sheet



Revision Date: 7/31/2014

SDS #: SDS-10238-01

HisDetector™ Western Blot Kit, AP Colorimetric

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

HisDetector™ Western Blot Kit, AP Colorimetric

Product Code

25-00-01

Kit Components:

Tris-Buffered Saline Tween Wash Solution	50-63-16
BCIP/NBT Phosphatase Substrate (1-Component)	50-81-08
Detector Block Solution 5X	71-83-01
HisDetector™ Nickel-AP (NSS)	25-01-02

Recommended Use Kit (See Attached Safety Data Sheets For Components Listed Above)

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755
Fax #: 1-301-948-0169
Web: www.kpl.com
Email: kplmsds@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER	Telephone: 13 11 26	Hours: 24 hours
CANADIAN TRANSPORT EMERGENCY CENTER	Telephone: (1) 613 996 6666	Hours: 24 hours/day, 7 days/week
UK – THE NATIONAL FOCUS	Telephone: (44) 029 2041 6388	Hours: 09:00-17:00 GMT
USA- NATIONAL RESPONSE CENTER	Telephone: (1) 800 424 8802	Hours: 24 hours/day, 7 days/week

CHEMTREC:

CHEMTREC Customer Number:- CCN12505*
For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 CCN12505 or
+1 703-527-3887 (collect calls accepted)

Safety Data Sheet



Revision Date: 7/18/2014

SDS #: 10239

HisDetector™ Nickel-AP

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

HisDetector™ Nickel-AP (NSS)

Product Code

25-01-02

Hazardous Reagent

HISDETECTOR™ NICKEL-AP

Hazardous Reagent Product code

Catalog No. listed above

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755
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2. HAZARD IDENTIFICATION

Hazard Type	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment.
Principle Route of Exposure	Ingestion, Inhalation and Skin contact.
Acute Effects: Eye:	May cause redness and irritation
Acute Effects: Skin:	Dry skin.

Acute Effects: Inhalation:	Data for 100% Glycerol: Evaporation at 20°C is negligible; a nuisance-causing concentration of airborne particles can, however, be reached quickly on spraying.
Acute Effects: Ingestion:	Diarrhoea.
Chronic Effects:	Not Available
Additional Information	Not Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CHEMICAL	% Weight	CAS #:
HisDetector™ Nickel-AP	Glycerol	<40%	56-81-5
	Nickel Sulphate Hexahydrate	<0.1%	10101-97-0

GHS Classification	Not Applicable: The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Regulation (EC) No 1272/2008
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4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists.
Oral Exposure	Rinse mouth. Refer for medical attention.
Inhalation Exposure	Remove subject to fresh air. Seek medical attention if necessary.
Skin Exposure	Rinse with copious amounts of water
Eye Exposure	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

5. FIRE FIGHTING MEASURES

Extinguishing media	Water spray. Alcohol-resistant foam. Dry powder. Carbon dioxide
Unusual Fire and Explosive Hazards	Data for 100% Glycerol: In case of fire: keep drums, etc., cool by spraying with water.
Flash Point	Not Available
Autoignition Temperature	Data for 100% Glycerol: 393°C
Flammability Statement	Combustible. Gives off irritating or toxic fumes (or gases) in a fire.
Specific hazards arising from the chemical	Upon evaporation of water, glycerol may omit toxic fumes under fire conditions. In the event of fire and/or explosion do not breathe fumes.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin and clothing.
Environmental Precautions	Not Applicable
Method of Containment	Collect leaking liquid in covered containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place.
Methods of Clean-up	Clean-up with copious amounts of water.
Other Information	Not Applicable

7. HANDLING AND STORAGE

Handling:	Wear appropriate PPE.
Storage:	Store at 2-8°C. refrigerated. Separated from strong oxidants.

8. EXPOSURE CONTROL

Respiratory Protection	Ventilation.
Eye Protection	Safety goggles.
Skin Protection	Protective gloves and clothing required
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless or Pale Yellow Solution.
Physical State	Liquid
Odor	Not Applicable
Odor Threshold	Not Applicable
pH	Not Available
Boiling Point	Not Available
Evaporation Rate	Not Available
Vapor Density	Data for 100% Glycerol: 3.2
Vapor Pressure	Data for 100% Glycerol: 0.01
Relative Density	Data for 100% Glycerol: 1.26
Auto-Ignition Temperature	Not Available
Water Solubility	Dilutable
Flammability	Data for 100% Glycerol: 393°C
Flash Point	Not Available
Viscosity	Viscous
Oxidizing Properties	Not Available
Explosive Properties	Data for 100% Glycerol: 2.6 - 11.3
Additional Parameters	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal condition
Conditions to avoid	Data for 100% Glycerol: NO open flames.
Incompatibility Materials to Avoid	Strong oxidizing agents and strong bases
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Data for 100% Glycerol: Reacts with strong oxidants causing fire and explosion hazard.

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral	Data for 100% Glycerol: LD50 oral rat: 12600 mg/kg Reference: Federation Proceedings, Federation of American Societies for Experimental Biology. Vol. 4, Pg. 142, 1945.
LD50 Dermal	Data for 100% Glycerol: LD50 dermal rat/rabbit: > 10000 mg/kg Species: Rabbit Reference: BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets. Vol. 9-4/1970,
LC50 Inhalation	Not Available

Chronic Toxicity

Carcinogenicity	Not Applicable
Irritation	Yes - May Occur
Corrosivity	Not Applicable
Sensitization	Not applicable.
Neurological Effects	Not applicable.
Mutagenic Effects	Not applicable.
Reproductive Effects	Not applicable.
Developmental Effects	Not applicable.
Target Organ Effects	Not applicable.
Other adverse effects	Not applicable.

12. ECOLOGICAL MEASURES

Ecotoxicity	Data for 100% Glycerol: Toxicity threshold (cell multiplication inhibition test) Algae (Microcystis aeruginosa) 2900 mg/l ; Protozoa (Entosiphon sulcatum) 3200 mg/l ; LC50 Goldfish >5000 mg/l/24 hr - modified ASTM D 1345 [Verschuere, K. Handbook of Environmental Data of Organic Chemicals. 2nd ed. New York, NY: Van Nostrand Reinhold Co., 1983., p. 695]
Persistence/Degradability	Data for 100% Glycerol: Readily biodegradable
Mobility in Environmental Media	Data for 100% Glycerol: Very high mobility in soil [Swann RL et al; Res Rev 85: 17-28 (1983)]

**Bioaccumulation/
Accumulation** Not expected

13. DISPOSAL MEASURES

Waste Disposal Method: Observe all Federal, State and Local laws concerning health and pollution.

Contaminated Packaging: Avoid contact with skin and clothing. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local regulations.

US EPA Waste Number: Not Applicable

14. TRANSPORTATION MEASURES

DOT: Not regulated.

IATA: Not regulated.

ADR (road)/ RID (rail): Not regulated.

IMDG (sea): Not regulated.

General Transport Regulations Not Applicable

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Triethylamine

CAS/313 Category Codes: 121-44-8 | CERCLA RQ: 5,000 | Section 313: 313 | RCRACODE: U404

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

This product contains the following chemical or chemicals which are subject to the reporting requirements of the Clean Air Act.

Chemical: TRIETHYLAMINE CAS Number: 121-44-8

Federal Regulatory Program Lists

Air Contaminants (Occupational and Safety Health Act) Hazardous Air Pollutants (Clean Air Act) Hazardous Constituents (Resource Conservation and Recovery Act) Hazardous Substances (Superfund) Toxic Release Inventory Chemicals California

State Regulatory Program Lists

Air Contaminants (California Occupational and Safety Health Act) California Air Toxics "Hot Spots" Chemicals (Assembly Bill 2588) California Toxic Air Contaminants (Assembly Bill 1807)

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: None Listed

State Right to Know Act

Chemical Name	Glycerol	Nickel Sulphate Hexahydrate
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Massachusetts	Listed	Not Listed
New Jersey	Listed	Listed
Pennsylvania	Listed	Not Listed
New York	Not Listed	Not Listed
Rhode Island	Not Listed	Not Listed

International Inventories

Chemical Name	Glycerol	Nickel Sulphate Hexahydrate
TSCA	Listed	Listed
DSL	Listed	Not Listed
NDSL	Not Listed	Not Listed
EINECS	Listed	Not Listed
CHINA	Listed	Listed
KECL	Listed	Listed
JAPAN:	Listed	Listed
AICS	Listed	Not Listed

EU Regulations

Annex I Index#	Not Applicable
Classification	Not Applicable: The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Regulation (EC) No 1272/2008
Risk Phrases	Not Applicable
Safety Phrases	Not Applicable
Symbols and Indications of Danger	Not Applicable
Specific Concentration Limits	Not Applicable
Export and Import	This substance is not listed in the Annex I of Regulation (EC) No 649/2012.
European Priority List	This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

Revision Date: 7/18/2014

Safety Data Sheet



Revision Date: 7/26/2014

Tris-Buffered Saline Tween Wash Solution

SDS #: SDS-10199-01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

Tris-Buffered Saline Tween Wash Solution

Product Code

50-63-16

Hazardous Reagent

None

Hazardous Reagent Product code

None

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755

Fax #: 1-301-948-0169

Web: www.kpl.com

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+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment.
Principle Route of Exposure	Not Available
Acute Effects: Eye:	May cause redness and irritation
Acute Effects: Skin:	Dry skin and Irritation may occur
Acute Effects: Inhalation:	May be harmful if inhaled in very large quantities.
Acute Effects: Ingestion:	May be harmful if swallowed.
Chronic Effects:	Not Available
Additional Information	The product contains no substances which at their given concentration, are considered to be

hazardous to health

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
Tris-Buffered Saline Tween Wash Solution	Not Applicable	Not Applicable	Not Applicable

GHS Classification	Not Applicable: The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Regulation (EC) No 1272/2008
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4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists
Oral Exposure	Rinse mouth. Refer for medical attention.
Inhalation Exposure	Remove subject to fresh air. Seek medical attention if necessary.
Skin Exposure	Flush skin with copious amounts of water.
Eye Exposure	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

5. FIRE FIGHTING MEASURES

Extinguishing media	Use extinguishing media appropriate for surrounding fire.
Unusual Fire and Explosive Hazards	Not Available
Flash Point	Not Available
Autoignition Temperature	Not Available
Flammability Statement	Not Available
Specific hazards arising from the chemical	Not Available
Protective equipment and precautions for firefighters	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin, eyes and clothing.
Environmental Precautions	No special environmental precautions required. Should not be released into the environment.
Method of Containment	Contain spill and then clean-up with copious amounts of water.
Methods of Clean-up	Clean up of spills requires no special equipment or procedures. Clean with copious amounts of water.
Other Information	Not Available

7. HANDLING AND STORAGE

SDS #: SDS-10199-01

Handling: Wear appropriate PPE. Refer to section 8.

Storage: Store at 2 – 8°C.

8. EXPOSURE CONTROL

Respiratory Protection	Ventilation, local exhaust, or breathing protection.
Eye Protection	Safety goggles.
Skin Protection	Protective gloves. Protective clothing.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless Solution
Physical State	Liquid.
Odor	Not Available
Odor Threshold	Not Available
pH	7.25-7.55
Boiling Point	Not Available
Evaporation Rate	Not Available
Vapor Density	Not Available
Vapor Pressure	Not Available
Relative Density	Not Available
Auto-Ignition Temperature	Not Available
Water Solubility	Dilutable
Flammability	Not Available
Flash Point	Not Available
Viscosity	Not Available
Oxidizing Properties	Not Available
Explosive Properties	Not Available
Additional Parameters	See Datasheet for other Product Information.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to avoid	Not Available
Incompatibility Materials to Avoid	Not Available
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, Sulphur Oxides, Hydrogen Chloride gas.
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Not Available

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral	No Data Available
LD50 Dermal	No Data Available

SDS #: SDS-10199-01

LC50 Inhalation No Data Available

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product.

Irritation No Data Available

Corrosivity No Data Available

Sensitization No Data Available

Neurological Effects No Data Available

Mutagenic Effects No Data Available

Reproductive Effects No Data Available

Developmental Effects No Data Available

Target Organ Effects No Data Available

Other adverse effects Not Available

12. ECOLOGICAL MEASURES

Ecotoxicity Not Available

Persistence/Degradability Not Available

Mobility in Environmental Media Not Available

Bioaccumulation/Accumulation Not Available

13. DISPOSAL MEASURES

Waste Disposal Method: Observe all Federal, State and Local laws concerning health and pollution.

Contaminated Packaging: Avoid contact with skin and clothing. Dispose of in compliance with the respective national and local regulations.

US EPA Waste Number: Not Available

14. TRANSPORTATION MEASURES

DOT: Not Available

IATA: Not Available

ADR (road)/ RID (rail): Not Available

IMDG (sea): Not Available

General Transport Regulations Not Available

15. REGULATORY MEASURES**This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

SDS #: SDS-10199-01

This product contains no chemicals which are subject to the reporting requirements of the Clean Air Act.

State Regulations**California Proposition 65:**

This product contains the following Proposition 65 chemicals: Not Listed

State Right to Know Act

Chemical Name **Not Applicable**

Massachusetts Not Applicable

New Jersey Not Applicable

Pennsylvania Not Applicable

New York Not Applicable

Rhode Island Not Applicable

International Inventories

Chemical Name **Not Applicable**

TSCA Not Applicable

DSL Not Applicable

NDSL Not Applicable

EINECS Not Applicable

CHINA Not Applicable

KECL Not Applicable

JAPAN: Not Applicable

AICS Not Applicable

EU Regulations

Annex I Index# Not Applicable

Classification Not Applicable:
The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per:
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Regulation (EC) No 1272/2008

Risk Phrases Not Applicable

Safety Phrases Not Applicable

Symbols and Indications of Danger Not Applicable

Specific Concentration Limits Not Applicable

Export and Import This substance is not listed in the Annex I of Regulation (EC) No 649/2012.

European Priority List This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

Revision Date: 7/26/2014



Safety Data Sheet

Revision Date: 6/11/2015

Detector Block Solution 5X

SDS #: SDS-10124-03

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
Detector Block Solution 5X (Sample)	SPL-DB
Detector Block Solution 5X	71-83-01
Detector Block Solution 5X	71-83-04
Detector Block Solution 5X	71-83-02

Hazardous Reagent	Hazardous Reagent Product code
None	Not Applicable

Recommended Use Reagent

Contact Manufacturer	KPL, Inc. 910 Clopper Road Gaithersburg, Maryland 20878 USA	Phone #:	1-301-948-7755
		Fax #:	1-301-948-0169
		Web:	www.kpl.com
		Email:	kplmsds@seracare.com

Emergency Telephone Numbers:

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+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): The product contains no substances which at their given concentration, are considered to be hazardous.
Principle Route of Exposure	The substance can be absorbed into the body by inhalation, through the skin and by ingestion.
Acute Effects: Eye:	Eye Irritant
Acute Effects: Skin:	Prolonged contact can cause skin irritation
Acute Effects: Inhalation:	Irritating to mucus membranes and upper respiratory tract.
Acute Effects: Ingestion:	None available
Chronic Effects:	None Available

Additional Information

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
Detector Block Solution 5X	2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	< 2.5%	1185-53-1

GHS Classification

Not Applicable:

The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Regulation (EC) No 1272/2008

4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists.
Oral Exposure	Rinse mouth. Refer for medical attention.
Inhalation Exposure	Remove subject to fresh air. If not breathing, give artificial respiration. If breathing is labored, give oxygen. Seek medical attention.
Skin Exposure	First rinse with plenty of water, then remove contaminated clothes and rinse again. Refer for medical attention.
Eye Exposure	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

5. FIRE FIGHTING MEASURES

Extinguishing media	Foam, Alcohol Foam, CO ₂ , Dry Chemical and Water/Fog
Unusual Fire and Explosive Hazards	May emit toxic fumes under fire conditions.
Flash Point	Not Applicable
Autoignition Temperature	Not Available
Flammability Statement	Not Available
Specific hazards arising from the chemical	Not Available
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin and clothing.
Environmental Precautions	Not Applicable
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Methods of Clean-up	Clean up the spill with absorbent material and place in closed containers for disposal. Wash the spill site thoroughly. Ventilate area before returning to the spill site.
Other Information	Not Applicable

7. HANDLING AND STORAGE

Handling:	Handle in accordance with good industrial hygiene and safety practice.
Storage:	Store at 2-8°C.

8. EXPOSURE CONTROL

Respiratory Protection	None required if good ventilation is maintained. Otherwise wear MSHA/NIOSH approved respirator suitable for vapor or mist concentrations encountered.
Eye Protection	Safety goggles.
Skin Protection	Protective gloves. Protective clothing.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, brownish solution.
Physical State	Liquid
Odor	Not Applicable
Odor Threshold	Not Applicable
pH	Not Applicable
Boiling Point	Not Applicable
Evaporation Rate	Not Applicable
Vapor Density	Not Applicable
Vapor Pressure	Not Applicable
Relative Density	Not Applicable
Auto-Ignition Temperature	Not Applicable
Water Solubility	Dilutable
Flammability	Not Applicable
Flash Point	Not Applicable
Viscosity	Not Applicable
Oxidizing Properties	Not Applicable
Explosive Properties	Not Applicable
Additional Parameters	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to avoid	Not Available
Incompatibility Materials to Avoid	Incompatible with bases and strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition may produce carbon monoxide, carbon dioxide, and nitrogen oxides.
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Not Available

11. TOXICOLOGY MEASURES

Acute Toxicity

SDS #: SDS-10124-03

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral Not Available

LD50 Dermal Not Available

LC50 Inhalation Not Available

Chronic Toxicity

Carcinogenicity Not Available

Irritation Not Available

Corrosivity Not Available

Sensitization Not Available

Neurological Effects Not Available

Mutagenic Effects Not Available

Reproductive Effects Not Available

Developmental Effects Not Available

Target Organ Effects Eyes, Skin and Respiratory tract

Other adverse effects Not Available

12. ECOLOGICAL MEASURES

Ecotoxicity Not Available

Persistence/Degradability Not Available

Mobility in Environmental Media Not Available

Bioaccumulation/Accumulation Not Available

13. DISPOSAL MEASURES

Waste Disposal Method: Observe all Federal, State, and Local laws concerning health and pollution.

Contaminated Packaging: Avoid contact with skin and clothing. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local regulations.

US EPA Waste Number: Not Available

14. TRANSPORTATION MEASURES

DOT: Not Available

IATA: Not Available

ADR (road)/ RID (rail): Not Available

IMDG (sea): Not Available

General Transport Regulations Not Available

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

SDS #: SDS-10124-03

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

Not Listed

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: None Listed

State Right to Know Act

Chemical Name 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride

New Jersey Listed
Pennsylvania Listed
New York Listed
Rhode Island Listed

International Inventories

Chemical Name 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride

TSCA Listed
DSL Listed
NDSL Not Listed
EINECS Listed
CHINA Listed
KECL Listed
JAPAN: Listed
AICS Listed

EU Regulations

Annex I Index# Not Applicable
Classification Not Applicable:
 The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per:
 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
 Regulation (EC) No 1272/2008
Risk Phrases Not Applicable
Safety Phrases Not Applicable
Symbols and Indications of Danger Not Applicable
Specific Concentration Limits Not Applicable

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

Revision Date: 6/11/2015

Safety Data Sheet



Revision Date: 6/30/2014

SDS #: 10125

BCIP/NBT Phosphatase Substrate (1-Component)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

BCIP/NBT Phosphatase Substrate (1-Component)

Product Code

50-81-07

SPL-BCIP

50-81-25

50-81-18

50-81-11

50-81-10

50-81-09

50-81-08

Hazardous Reagent

BCIP/NBT 1-COMPONENT

Hazardous Reagent Product code

Catalog No. listed above

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-948-7755

Fax #: 1-301-948-0169

Web: www.kpl.com

Email: kplmsds@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER

Telephone: 13 11 26

Hours: 24 hours

CANADIAN TRANSPORT EMERGENCY CENTER

Telephone: (1) 613 996 6666

Hours: 24 hours/day, 7 days/week

UK –

THE NATIONAL FOCUS

Telephone: (44) 029 2041 6388

Hours: 09:00-17:00 GMT

USA-

NATIONAL RESPONSE CENTER

Telephone: (1) 800 424 8802

Hours: 24 hours/day, 7 days/week

CHEMTREC:

CHEMTREC Customer Number:- CCN12505*

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident

Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 CCN12505 or

+1 703-527-3887 (collect calls accepted)

2. HAZARD IDENTIFICATION

Hazard Type	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS): The product contains no substances which at their given concentration, are considered to be hazardous.
Principle Route of Exposure	The substance can be absorbed into the body by inhalation of its vapour and by ingestion.
Acute Effects: Eye:	Redness. Pain.
Acute Effects: Skin:	Prolonged and repeated contact with product may cause skin irritation.
Acute Effects: Inhalation:	Not Applicable
Acute Effects: Ingestion:	Not Applicable
Chronic Effects:	Repeated or prolonged contact may cause skin sensitization.
Additional Information	None Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
BCIP/NBT Phosphatase Substrate (1-Component)	1,2 Propanediol	5 %	57-55-6

GHS Classification	Not Applicable: The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment as per: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Regulation (EC) No 1272/2008
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4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists.
Oral Exposure	Rinse mouth.
Inhalation Exposure	Fresh air, rest.
Skin Exposure	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eye Exposure	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.

5. FIRE FIGHTING MEASURES

Extinguishing media	Powder, alcohol-resistant foam, water spray, carbon dioxide.
Unusual Fire and Explosive Hazards	Data for 100% 1,2 Propanediol: Above 99°C explosive vapour/air mixtures may be formed.
Flash Point	Data for 100% 1,2 Propanediol: C c.c.; 107°C o.c.
Autoignition Temperature	Data for 100% 1,2 Propanediol: 371°C

Flammability Statement	Data for 100% 1,2 Propanediol: Combustible
Specific hazards arising from the chemical	Data for 100% 1,2 Propanediol: Reacts with strong oxidants, causing fire hazard.
Protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with skin and clothing.
Environmental Precautions	Not Available
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Methods of Clean-up	Wash away spilled liquid with plenty of water.
Other Information	Not Applicable

7. HANDLING AND STORAGE

Handling:	Handle in accordance with good industrial hygiene and safety practice.
Storage:	Store at 4°C.

8. EXPOSURE CONTROL

Respiratory Protection	None required if good ventilation is maintained. Otherwise wear MSHA/NIOSH approved respirator suitable for vapor or mist concentrations encountered. May be harmful if inhaled in very large quantities.
Eye Protection	Safety spectacles.
Skin Protection	Protective gloves. Protective clothing.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear yellowish colored solution.
Physical State	Liquid
Odor	Not Applicable
Odor Threshold	Not Applicable
pH	9.0 - 9.6
Boiling Point	Data for 100% 1,2 Propanediol: 188.2°C
Evaporation Rate	Not Applicable
Vapor Density	Data for 100% 1,2 Propanediol: (air = 1): 2.6
Vapor Pressure	Data for 100% 1,2 Propanediol: Pa at 20°C: 10.6
Relative Density	Data for 100% 1,2 Propanediol: (air = 1): 2.6
Auto-Ignition Temperature	Data for 100% 1,2 Propanediol: 371°C
Water Solubility	Dilutable
Flammability	Data for 100% 1,2 Propanediol: Combustible
Flash Point	Data for 100% 1,2 Propanediol: C c.c.; 107°C o.c.

Viscosity	Not Applicable
Oxidizing Properties	Not Applicable
Explosive Properties	Data for 100% 1,2 Propanediol: vol% in air: 2.6-12.6
Additional Parameters	See Datasheet for other Product Information.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to avoid	Data for 100% 1,2 Propanediol: Above 99°C explosive vapour/air mixtures may be formed.
Incompatibility Materials to Avoid	Strong oxidizing agents and strong bases.
Hazardous Decomposition Products	Carbon Monoxide, Carbon Dioxide
Hazardous Polymerization	Will not occur
Possibility of hazardous reactions	Not Available

11. TOXICOLOGY MEASURES

Acute Toxicity

The toxicological risks are minor due to the low concentration of hazardous ingredients. The following toxicological information is for the hazardous ingredient in pure form.

LD50 Oral	Data for 100% 1,2 Propanediol: LD50 oral rat: 20000 mg/kg Reference: Toxicology and Applied Pharmacology. Vol. 45, Pg. 362, 1978.
LD50 Dermal	Data for 100% 1,2 Propanediol: LD50 dermal rat/rabbit: 20800 mg/kg Species: Rabbit
LC50 Inhalation	Not Available
<u>Chronic Toxicity</u>	
Carcinogenicity	Not Applicable
Irritation	Data for 100% 1,2 Propanediol: The substance irritates the eyes.
Corrosivity	Not Available
Sensitization	Data for 100% 1,2 Propanediol: Repeated or prolonged contact may cause skin sensitization.
Neurological Effects	Not Available
Mutagenic Effects	Not Available
Reproductive Effects	Not Available
Developmental Effects	Not Available
Target Organ Effects	Data for 100% 1,2 Propanediol: Kidneys
Other adverse effects	Not Available

12. ECOLOGICAL MEASURES

Ecotoxicity	Not Available
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Persistence/Degradability	Not Available
Mobility in Environmental Media	Not Available
Bioaccumulation/Accumulation	Not Available

13. DISPOSAL MEASURES

Waste Disposal Method:	Observe all Federal, State, and Local laws concerning health and pollution.
Contaminated Packaging:	Avoid contact with skin and clothing. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local regulations.
US EPA Waste Number:	Not Available

14. TRANSPORTATION MEASURES

DOT:	Not Regulated
IATA:	Not Regulated
ADR (road)/ RID (rail):	Not Regulated
IMDG (sea):	Not Regulated
General Transport Regulations	Not Available

15. REGULATORY MEASURES

This product is a mixture that may contain one or more hazardous chemicals. The hazardous ingredients listed are only those as required by 29 CFR 1910.1200 (OSHA HCS).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains no chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (See 40 CFR 61)

Not Listed

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: None Listed

State Right to Know Act

Chemical Name **1,2 Propanediol**

Massachusetts Not Listed

New Jersey Listed

Pennsylvania Listed

New York Not Listed

Rhode Island Listed

International Inventories

SDS #: 10125

BCIP/NBT Phosphatase Substrate (1-Component)

Chemical Name 1,2 Propanediol

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Regulation (EC) No 1272/2008

Risk Phrases Not Applicable

Safety Phrases Not Applicable

Symbols and Indications of Danger Not Applicable

Specific Concentration Limits Not Applicable

Export and Import This substance is not listed in the Annex I of Regulation (EC) No 689/2008.

European Priority List This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

16. OTHER INFORMATION

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. KPL shall not be held liable for any damage resulting from handling or from contact with the above product. Users should make their own investigations to determine the suitability of the information for their particular purposes. This material is sold for research purposes and is intended as laboratory reagents only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

Revision Date: 6/30/2014