

Safety Data Sheet



Revision Date: 7/29/2014

SDS #: SDS-10271-01

SureLINK™ AP Conjugation Kit

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

SureLINK™ AP Conjugation Kit

Product Code

85-00-01

Kit Components:

SureLINK™ Modified AP	85-01-01
AP Modification Buffer	85-02-01
SFB	80-02-01
AP Conjugation Buffer (5X)	85-03-01
AP Storage Buffer	85-04-01

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: 7/29/2014

SureLINK™ Modified AP

SDS #: SDS-10272-01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
SureLINK™ Modified AP	85-01-02
SureLINK™ Modified AP	85-01-01

Hazardous Reagent
SureLINK™ Modified 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
Fax #: 1-301-948-0169
Web: www.kpl.com
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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 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>
SureLINK™ Modified AP	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	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	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-10272-01

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	Lyophilized Pellet
Physical State	Solid
Odor	Not Available
Odor Threshold	Not Available
pH	Not Available
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	Not Available

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-10272-01

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-10272-01

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: 7/29/2014

Safety Data Sheet



Revision Date: 7/29/2014

AP Modification Buffer

SDS #: SDS-10313-01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

AP Modification Buffer

Product Code

85-02-01

Hazardous Reagent

None

Hazardous Reagent Product code

None

Recommended Use Reagent

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Gaithersburg, Maryland 20878
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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>
AP Modification Buffer	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-10313-01

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	7.15 - 7.45
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-10313-01

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-10313-01

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: 7/29/2014



Material Safety Data Sheet

NFPA	Personal protective equipment	Transport Symbol
		Not regulated.

Preparation Date No data available

Revision Date 23-Jul-2005

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product name SFB
Product code 80-02-01, 80-02-02, 80-02-03, 80-02-04
Chemical Name Succinimidyl-4-Formyl Benzoate
Common Name No information available.

Recommended use No information available.

Contact manufacturer
KPL
910 Clopper Road
Gaithersburg, Maryland 20878
USA
301-948-7755 • 800-638-3167
FAX 301-948-0169
www.kpl.com

Supplier
KPL
910 Clopper Road
Gaithersburg, Maryland 20878
USA
301-948-7755 • 800-638-3167
FAX 301-948-0169
www.kpl.com

Emergency telephone number 301-948-7755; 800-638-3167

2. HAZARDS IDENTIFICATION

Emergency Overview

This product has not been thoroughly investigated however, similar compounds are known to be chemically reactive with proteins and other biochemicals and should be treated as potentially hazardous. Harmful in contact with skin. Harmful if swallowed. Harmful by inhalation.

Physical state Solid Powder

Odor Slight.

Potential health effects

Principle Routes of Exposure Eye contact, Skin contact, Inhalation, Ingestion.

Acute effects

Eyes May cause eye irritation with susceptible persons.
Skin Harmful in contact with skin.
Inhalation Harmful by inhalation.
Ingestion Harmful if swallowed.

Chronic effects No information available.

See Section 11 for additional Toxicological information.

Main symptoms No information available.

Aggravated Medical Conditions Skin disorders.

Interactions with other chemicals No information available.

Potential environmental effects There is no known ecological information for this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

CHEMICAL NAME	CAS-No.	WEIGHT %
Succinimidyl-4-Formyl Benzoate	No CAS#	60 - 100

4. FIRST AID MEASURES

General advice Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.

Eye contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is required.

Ingestion Drink plenty of water. Do not induce vomiting without medical advice. Immediate medical attention is required.

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable properties Powdered material may form explosive dust-air mixtures.

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Water. Carbon dioxide (CO₂). alcohol-resistant foam. dry chemical.

Unsuitable extinguishing media No information available

Specific hazards arising from the chemical
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 suit.

NFPA

Health 2

Flammability 1

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation. Avoid dust formation. Take precautionary measures against static discharges. Remove all sources of ignition.
Environmental precautions	Should not be released into the environment.
Methods for containment	No information available
Methods for clean-up	Take up mechanically and collect in suitable container for disposal. Avoid dust formation.
Other information	Not applicable

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Take precautionary measures against static discharges. Remove all sources of ignition. Ensure adequate ventilation.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep away from heat. Keep in properly labelled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

Engineering controls Ensure adequate ventilation, especially in confined areas

Personal protective equipment

Eye/face protection Tightly fitting safety goggles.

Skin protection Long sleeved clothing. Protective gloves.

Respiratory protection Respirator must be worn if exposed to dust. Breathing apparatus with filter.

General hygiene considerations

Use only in an area equipped with a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white.	
Odor	Slight.	
Odor threshold	No information available	
Physical state	Solid. Powder.	
pH	No data available	
Flash point	No data available	
Autoignition temperature	No data available	
Flammability Limits in Air	Upper No data available	Lower No data available
Explosive properties	No information available	
Oxidizing properties	No information available	
Evaporation Rate	No data available	
Vapor pressure		
Vapor density		
Specific Gravity	No data available	
Density	No data available	
Bulk density	No data available	
Solubility	No information available.	
Water solubility	slightly soluble	
Partition coefficient (n-octanol/water)	No data available.	
Viscosity	No information available.	
Molecular Weight	260.2	

10. STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions.
Conditions to avoid	Avoid dust formation. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx).
Possibility of hazardous reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information Harmful in contact with skin. Harmful if swallowed. Harmful by inhalation.

Component Information

Chronic toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product.

Legend:

Irritation No information available.

Corrosivity	No information available.
Sensitization	No information available.
Neurological effects	No information available.
Mutagenic effects	No information available.
Reproductive effects	No information available.
Developmental effects	No information available.
Target Organ effects	No information available.
Other adverse effects	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available.

Persistence/Degradability	No information available
Bioaccumulation/ Accumulation	No information available.
Mobility in Environmental Media	No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of in accordance with National, State and Local regulations
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal
US EPA Waste Number	No data available

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated.
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15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	CHINA	KECL	PICCS	AICS
Succinimidyl-4-Formyl Benzoate	-	-	-	-	-	-	-	-	-	-

TSCA Does not Comply
DSL Does not Comply
NDSL Complies
EINECS Does not Comply
ELINCS Does not Comply
ENCS Does not Comply
CHINA Does not Comply
KECL Does not Comply
PICCS Does not Comply
AICS Does not Comply

USA

Federal Regulations

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.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

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

None

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

State Right-to-Know

Legend:

X - Listed

Canada

WHMIS hazard class

Non-controlled

16. OTHER INFORMATION

Prepared By Product Stewardship
 23 British American Blvd.
 Latham, NY 12110
 1-800-572-6501

Revision Date 23-Jul-2005

Revision summary No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS

Safety Data Sheet



Revision Date: 7/29/2014

AP Conjugation Buffer

SDS #: SDS-10314-01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

AP Conjugation Buffer

Product Code

85-03-01

Hazardous Reagent

None

Hazardous Reagent Product code

None

Recommended Use Reagent

Contact Manufacturer KPL, Inc.
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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	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>
AP Conjugation Buffer	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-10314-01

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	5.25 - 5.75
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	Not Available

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-10314-01

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-10314-01

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
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Massachusetts	Not Applicable
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New Jersey	Not Applicable
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Pennsylvania	Not Applicable
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New York	Not Applicable
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Rhode Island	Not Applicable
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International Inventories

Chemical Name	Not Applicable
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TSCA	Not Applicable
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DSL	Not Applicable
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NDSL	Not Applicable
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EINECS	Not Applicable
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CHINA	Not Applicable
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KECL	Not Applicable
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JAPAN:	Not Applicable
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AICS	Not Applicable
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EU Regulations

Annex I Index#	Not Applicable
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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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Risk Phrases	Not Applicable
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Safety Phrases	Not Applicable
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Symbols and Indications of Danger	Not Applicable
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Specific Concentration Limits	Not Applicable
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Export and Import	This substance is not listed in the Annex I of Regulation (EC) No 649/2012.
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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.).
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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: 7/29/2014

Safety Data Sheet



Revision Date: 7/29/2014

AP Storage Buffer

SDS #: SDS-10315-01

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

AP Storage Buffer

Product Code

85-04-01

Hazardous Reagent

AP Storage Buffer

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 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

SDS #: SDS-10315-01

Additional Information

Not Available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
AP Storage Buffer	Glycerol	<80%	56-81-5

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. 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	Data for 100% Glycerol: 176°C c.c.
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

SDS #: SDS-10315-01

Handling: Wear appropriate PPE. See section 8

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 solution
Physical State	Liquid
Odor	Not Available
Odor Threshold	Not Available
pH	Not Available
Boiling Point	Data for 100% Glycerol: 290°C
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	Data for 100% Glycerol: 393°C
Water Solubility	Dilutable
Flammability	Data for 100% Glycerol: 393°C
Flash Point	Data for 100% Glycerol: 176°C c.c.
Viscosity	Viscous
Oxidizing Properties	Not Available
Explosive Properties	Data for 100% Glycerol: 2.6 - 11.3
Additional Parameters	See Datasheet for other Product Information.

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.

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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
<u>Chronic Toxicity</u>	
Carcinogenicity	Not Available
Irritation	Yes - May Occur
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	Not Available
Other adverse effects	Not Available

12. ECOLOGICAL MEASURES

Ecotoxicity	Data for 100% Glycerol: Toxicity threshold (cell multiplication inhibition test) Algae (<i>Microcystis aeruginosa</i>) 2900 mg/l ; Protozoa (<i>Entosiphon sulcatum</i>) 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 Available
IATA:	Not Available
ADR (road)/ RID (rail):	Not Available
IMDG (sea):	Not Available
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

SDS #: SDS-10315-01

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)

This product contains no chemical or 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: None Listed

State Right to Know Act

Chemical Name **Glycerol**

Massachusetts	Listed
New Jersey	Listed
Pennsylvania	Listed
New York	Not Listed
Rhode Island	Not Listed

International Inventories

Chemical Name **Glycerol**

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
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: 7/29/2014