



Safety Data Sheet

KPL ABTS 2-Component Microwell Peroxidase Substrate

SDS-10138

Rev. Number: 4 Rev. Date: Dec 16, 2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
KPL ABTS 2-Component Microwell Peroxidase Substrate	5120-0033 (50-62-01) 5120-0032 (50-62-00)

Kit Components

KPL ABTS Microwell Peroxidase 2-Component
Substrate Solution A

Part Code

5120-0034 (50-64-00)
5120-0035 (50-64-02)

KPL Peroxidase Substrate Solution B

5120-0037 (50-65-00)
5120-0038 (50-65-02)

Recommended Use:

Reagent

Contact Manufacturer:

SeraCare Life Sciences
910 Clopper Road
Gaithersburg, MD 20878

Phone #: (508) 244-6400
US Toll Free: (800) 676-1881

Fax #: (508) 634-3394

Web: www.seracare.com

Email: customerservice@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: 7/30/2014

ABTS Microwell Peroxidase Substrate Solution A

SDS #: SDS-10147-02

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

ABTS Microwell Peroxidase 2-Component Substrate Solution A

Product Code

50-64-00

50-64-09

50-64-02

Hazardous Reagent

ABTS Microwell Peroxidase Substrate Solution A

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
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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 classified as hazardous to health or the environment.

Data for 100% Cacodylic Acid:- Cacodylic Acid is a CARCINOGEN. HANDLE WITH EXTREME CAUTION. There may be no safe level of exposure to a carcinogen, so all contact should be reduced to the lowest possible level.

Principle Route of Exposure

Data for 100% Cacodylic Acid:- Skin, Eye, Inhalation and Ingestion

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- Acute Effects: Eye:** May cause irritation, burns, and red, watery eyes.
- Acute Effects: Skin:** May be absorbed. May cause irritation, burns, itching, rash and loss of pigment.
- Acute Effects: Inhalation:** May irritate the nose and throat.
- Acute Effects: Ingestion:** May cause nausea, vomiting and drowsiness
- Chronic Effects:** Data for 100% Cacodylic Acid:- Cacodylic Acid is a CARCINOGEN in humans. There is evidence that Arsenic and Arsenic compounds cause bladder, lung, and skin cancer in humans. There is limited evidence that Cacodylic Acid is a teratogen in animals. Until further testing has been done, it should be treated as a possible teratogen in humans. Repeated skin contact can cause thickened skin and/or patchy areas of darkening and loss of pigment. Some persons may develop white lines on the nails. Long-term exposure can cause an ulcer or hole in the "bone" (septum) dividing the inner nose, hoarseness and sore eyes. Cacodylic Acid may damage the nervous system causing numbness, "pins and needles," and/or weakness in the hands and feet. Cacodylic Acid may damage the liver.

Additional Information ABTS Substrate solution contains less than 0.01% carcinogen. Data for 100% Cacodylic Acid:- Cacodylic Acid is a CARCINOGEN in humans. There may be no safe level of exposure to a carcinogen, so all contact should be reduced to the lowest possible level.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
ABTS Microwell Peroxidase Substrate Solution A	Cacodylic Acid	<0.01%	75-60-5

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** Show this safety data sheet to the doctor in attendance. If symptoms persist, call a physician.
- Oral Exposure** Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Rest. Refer for medical attention.
- Inhalation Exposure** Fresh air, rest.
- Skin Exposure** Remove all contaminated clothes and shoes. 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** Foam, Alcohol Foam, CO2, Dry Chemical and Water/Fog
- Unusual Fire and Explosive Hazards** May emit toxic fumes under fire conditions.

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Flash Point Not Available

Autoignition Temperature Not Available

Flammability Statement Not Available

Specific hazards arising from the chemical Data for 100% Cacodylic Acid:- Poisonous gasses are produced in fire. Does not burn.

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 DO NOT wash into sewer. It may be necessary to contain and dispose of Cacodylic Acid as a HAZARDOUS WASTE. Contact your state Department of Environmental Protection (DEP) or your regional office of the federal Environmental Protection Agency (EPA) for specific recommendations.

Method of Containment Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place.

Methods of Clean-up Moisten spilled material first or use a HEPA-filter vacuum for clean-up and deposit in sealed containers. Ventilate and wash area after clean-up is complete.

Other Information Data for 100% Cacodylic Acid:- Evacuate personnel and secure and control entrance to the area. Eliminate all ignition sources.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice.

Storage: Store at 2-8 °C separated from strong oxidants.

8. EXPOSURE CONTROL

Respiratory Protection Ventilation, local exhaust, or breathing protection. Data for 100% Cacodylic Acid:- Where the potential exists for exposure under 0.5 mg/m³ (as Arsenic), use a NIOSH approved negative pressure, air purifying, particulate filter respirator. Where the potential exists for exposure over 0.5 mg/m³ (as Arsenic), use a NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus operated in a pressure-demand or other positivepressure mode.

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 Colorless Solution

Physical State Liquid

SDS #: SDS-10147-02

Odor	Not Available
Odor Threshold	Not Available
pH	3.85 - 4.15
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 product specific information.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Conditions to avoid	Not Available
Incompatibility Materials to Avoid	Not Available
Hazardous Decomposition Products	Not Available
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	Acute oral toxicity (LD50): 644 mg/kg [Rat].
LD50 Dermal	Not Available
LC50 Inhalation	Not Available

Chronic Toxicity

Carcinogenicity	Data for 100% Cacodylic Acid:- A carcinogen in humans.
Irritation	Data for 100% Cacodylic Acid:- An eye, skin and respiratory irritant
Corrosivity	Not Applicable
Sensitization	Not applicable.
Neurological Effects	Data for 100% Cacodylic Acid:- may damage the nervous system

SDS #: SDS-10147-02

Mutagenic Effects	Not applicable.
Reproductive Effects	Data for 100% Cacodylic Acid:- There is limited evidence that Cacodylic Acid is a teratogen in animals. Until further testing has been done, it should be treated as a possible teratogen in humans.
Developmental Effects	Not applicable.
Target Organ Effects	Eyes, Skin, Respiratory, Nervous System and Liver
Other adverse effects	Not applicable.

12. ECOLOGICAL MEASURES

Ecotoxicity	The following environmental classifications according to the Preparation Directive 1999/45/EC apply additionally to the indicated concentrations of the substance: 0,25%≤C<2,5% - R52/53 (Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment)
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. Avoid escape into water, drainage, sewer, or the ground. If there is no way of recycling it must be disposed of in compliance with the respective national and local regulations.
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:	Data for 100% Cacodylic Acid:- U136

14. TRANSPORTATION MEASURES

DOT:	Data for 100% Cacodylic Acid:- DOT Classification: CLASS 6.1: Poisonous material. UN1572 PG: II Special Provisions for Transport: Marine Pollutant
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

SDS #: SDS-10147-02

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: Cacodylic Acid - Cancer Listed May 1, 1996

State Right to Know Act

Chemical Name **Cacodylic Acid**

Massachusetts Listed
New Jersey Listed
Pennsylvania Listed
New York Listed
Rhode Island Listed

International Inventories

Chemical Name **Cacodylic Acid**

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

EU Regulations

Annex I Index# 033-002-00-5 Arsenic compounds, with the exception of those specified elsewhere in this Annex.

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

SDS #: SDS-10147-02

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: 7/30/2014



Safety Data Sheet

KPL Peroxidase Substrate Solution B

SDS-10143

Rev. Number: 3 Rev. Date: Dec 16, 2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
KPL Peroxidase Substrate Solution B	5120-0040 (50-65-05)
	5120-0039 (50-65-03)
	5120-0038 (50-65-02)
	5120-0037 (50-65-00)
	5120-0021 (37-00-86)
	5120-0020 (37-00-79)
	5120-0030 (37-01-61)

Hazardous Reagent

Not Available

Hazardous Reagent Product code

Not Available

Recommended Use:

Reagent

Contact Manufacturer:

SeraCare Life Sciences
910 Clopper Road
Gaithersburg, MD 20878

Phone #: (508) 244-6400
US Toll Free: (800) 676-1881

Fax #: (508) 634-3394

Web: www.seracare.com

Email: customerservice@seracare.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER

Telephone: 13 11 26 - Hours: 24 hours

CANADIAN TRANSPORT EMERGENCY CENTER

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Telephone: (44) 029 2041 6388 - Hours: 09:00-17:00 GMT

USA - NATIONAL RESPONSE CENTER

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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.

GHS Classification

Not Applicable:

SDS-10143

Rev. Number: 3

Rev. Date: Dec 16, 2016

Hazard Statements:	Not Applicable
Precautionary Statements:	Not Applicable
Symbols and Indications of Danger:	Not Applicable
Principle Route of Exposure:	Not Applicable
Acute Effects: Eye	Not Applicable
Acute Effects: Skin:	Not Applicable
Acute Effects: Inhalation:	Not Applicable
Acute Effects: Ingestion:	Not Applicable
Chronic Effects:	Not Applicable
Additional Information:	Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
Peroxidase Substrate Solution B	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

4. FIRST AID MEASURES

General Advice	Not Applicable
Oral Exposure	Rinse mouth
Inhalation Exposure	Not Applicable
Skin Exposure	Wash exposed area with soap and water. Wash contaminated clothing before reuse.
Eye Exposure	Flush eyes with copious amounts of water or saline for 15 minutes.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unusual Fire and Explosive Hazards:	Not Applicable
Flash Point:	Not Applicable
Auto ignition Temperature:	Not Applicable
Flammability Statement:	Not Applicable
Specific hazards arising from the chemical:	Not Applicable
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 face-piece 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:	Not Applicable
Method of Containment:	Containment of spills requires no special equipment or procedures. Cover with absorbent.
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

8. EXPOSURE CONTROL

Respiratory Protection:	None required if good ventilation is maintained. Otherwise wear MSHA/NIDSH approved respirator suitable for vapor or mist concentrations encountered.
Eye Protection:	Safety glasses with side-shields.
Skin Protection:	Protective gloves; protective clothing
Ingestion	Do not eat, drink, or smoke while handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, Colorless Solution. Relatively free of particulate matter.
Physical State:	Liquid
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 recommended storage conditions.
Conditions to avoid:	Not applicable.
Incompatibility Materials to Avoid:	Not applicable.
Hazardous Decomposition Products:	Not applicable.
Hazardous Polymerization:	Not applicable.
Possibility of hazardous reactions:	Not applicable.

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:	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:	Not 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:	Normal disposal with copious amounts of water. Observe all Federal, State and Local environmental regulations.
Contaminated Packaging:	Not Available.
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 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 no chemical or chemicals which are subject to the reporting requirements of the Act 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 Available

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals None 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

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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	The product contains no substances which at their given concentration, are considered to be hazardous to health or the environment.
Precautionary Statements:	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 accurate, complete and current but does not purport to be all inclusive and shall be used as a guide. SeraCare Life Sciences makes no representation or warranties with respect to the product described herein, including but not limited to any implied warranties or merchantability or fitness for a particular use. SeraCare assumes no liability or responsibility and authorizes no other person to assume any additional liability or responsibility as a result of the use of this product or the information contained in the Safety Data Sheet.