Safety Data Sheet

Revision Date: **7/30/2014**

ABTS Peroxidase Substrate

SDS #: SDS-10146-02

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:	Product Code
ABTS Peroxidase Substrate	50-66-18
ABTS Peroxidase Substrate	50-66-15
ABTS Peroxidase Substrate	50-66-09
ABTS Peroxidase Substrate	50-66-06
ABTS Peroxidase Substrate	50-66-01
ABTS Peroxidase Substrate	50-66-00

Hazardous Reagent
ABTS Peroxidase Substrate

Hazardous Reagent Product code
Catalog No. listed above

Recommended Use Antibody

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.
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

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

Component	CHEMICAL	% Weight	CAS #:
ABTS Peroxidase Substrate	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	Remov 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.
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	May appear clear, pale green solution
Physical State	Liquid
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 Available
Sensitization	Not Available
Neurological Effects	Data for 100% Cacodylic Acid:- may damage the nervous system
Mutagenic Effects	Not Available
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 Available
Target Organ Effects	Eyes, Skin, Respiratory, Nervous System and Liver
Other adverse effects	Not Available

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

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
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.

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