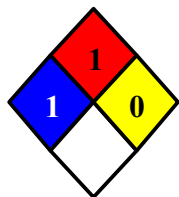


Material Safety Data Sheet



Revision Date: 11/7/2011

MSDS #: 10152

54-62-10

54-62-15

Protein Detector™ ELISA Kit, Anti-Human ABTS® System

54-62-18

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description

CATALOG NO.

Protein Detector™ ELISA Kit, Anti-Human
ABTS® System

54-62-10

Protein Detector ELISA Kit, Anti-Rabbit ABTS System

54-62-15

Protein Detector ELISA Kit, Anti-Mouse ABTS System

54-62-18

Hazardous Reagents:

50% Glycerol

50-83-00

ABTS® Peroxidase Stop Solution

50-85-00

Recommended Use Antibody and 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: msds@kpl.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

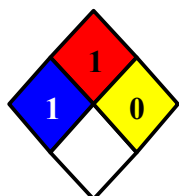
Hours: 09:00-17:00 GMT

USA- NATIONAL RESPONSE CENTER

Telephone: (1) 800 424 8802

Hours: 24 hours/day, 7 days/week

Material Safety Data Sheet



Revision Date: 10/21/2011

MSDS #: 10162

50-83-00

50% Glycerol Solution

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description

50% Glycerol Solution

CATALOG NO.

50-83-00

Hazardous Reagent

50% GLYCEROL SOLUTION

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: msds@kpl.com

Emergency Telephone Numbers:

AUSTRALIA – POISONS INFORMATION CENTER
CANADIAN TRANSPORT EMERGENCY CENTER
UK – THE NATIONAL FOCUS
USA- NATIONAL RESPONSE CENTER

Telephone: 13 11 26
Telephone: (1) 613 996 6666
Telephone: (44) 029 2041 6388
Telephone: (1) 800 424 8802

Hours: 24 hours
Hours: 24 hours/day, 7 days/week
Hours: 09:00-17:00 GMT
Hours: 24 hours/day, 7 days/week

2. HAZARD IDENTIFICATION

Hazard Type	Health Hazard: Irritant Fire Hazard: Data for 100% Glycerol: Combustible
Principle Route of Exposure	Ingestion, Inhalation and Skin contact.
Acute Effects: Eye:	May cause redness and Irritation
Acute Effecta: 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

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
50% Glycerol Solution	GLYCEROL	59%	56-81-5

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

Handling: Store at 4°C, refrigerated.

Storage: 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	Clear Colorless solution.
Physical State	Liquid
Odor	Not Applicable
Odor Threshold	Not Applicable
pH	Not Applicable
Boiling Point	Data for 100% Glycerol: 290°C
Evaporation Rate	Not Applicable
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 Applicable
Explosive Properties	Data for 100% Glycerol: 2.6 - 11.3
Additional Parameters	Not Applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
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
<u>Chronic Toxicity</u>	
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 (<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 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 g 2.C1.

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)

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

International Inventories

Chemical Name GLYCEROL

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

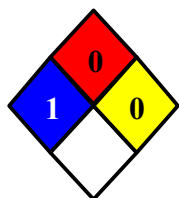
EU Regulations

Annex I Index#	Not Applicable
Classification	Not Applicable
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.

Material Safety Data Sheet



Revision Date: 10/14/2011

MSDS #: 10184

50-85-00

50-85-02

ABTS® Peroxidase Stop Solution

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description

ABTS® Peroxidase Stop Solution

CATALOG NO.

50-85-00

50-85-02

Hazardous Reagent

ABTS® Peroxidase Stop Solution, 5% SDS

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: msds@kpl.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

2. HAZARD IDENTIFICATION

Hazard Type Irritant Data for 100% Sodium Dodecyl Sulfate: Combustible and Irritant

Principle Route of Exposure The substance can be absorbed into the body through the skin and by ingestion .

Acute Effects: Eye: Redness

Acute Effecta: Skin: Skin Irritant

Acute Effects: Inhalation: Data for 100% Sodium Dodecyl Sulfate: Sore throat, Cough.

Acute Effects: Ingestion: Data for 100% Sodium Dodecyl Sulfate: Nausea, vomiting and diarrhoea.

Chronic Effects: Data for 100% Sodium Dodecyl Sulfate: EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis.

Additional Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
ABTS® Peroxidase Stop Solution	Dodecyl Sulfate, Sodium Salt	5%	151-21-3

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	Foam, Alcohol Foam, CO2, Dry Chemical and Water/Fog
Unusual Fire and Explosive Hazards	Not Available
Flash Point	Not Available
Autoignition Temperature	Not Available
Flammability Statement	Not Flammable
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	Data for 100% Dodecyl Sulfate, Sodium Salt: Particulate filter adapted to the airborne concentration of the substance.
Environmental Precautions	Not Available
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Methods of Clean-up	Clean-up with copious amounts of water.
Other Information	Not Available

7. HANDLING AND STORAGE

Handling:	Handle in accordance with good industrial hygiene and safety practice.
Storage:	Store at room temperature.

8. EXPOSURE CONTROL

Respiratory Protection	Ventilation, local exhaust, or breathing protection
Eye Protection	Safety goggles. Safety spectacles
Skin Protection	Wear appropriate personal protective clothing to prevent skin contact and protective gloves.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, colorless solution at room temperature. White solid at refrigerated temperatures.
Physical State	Liquid at RT
Odor	Data for 100% Dodecyl Sulfate, Sodium Salt: Faint odor of fatty substances
Odor Threshold	Not Available
pH	Not Available
Boiling Point	100°C/212°F (water)
Evaporation Rate	Not Available
Vapor Density	Not Available
Vapor Pressure	Not Available
Relative Density	Data for 100% Dodecyl Sulfate, Sodium Salt: 400-600 kg/m ³
Auto-Ignition Temperature	Not Available
Water Solubility	Data for 100% Dodecyl Sulfate, Sodium Salt: g/100 ml at 20°C: 15 (moderate)
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	Data for 100% Dodecyl Sulfate, Sodium Salt: The substance decomposes on burning producing toxic and corrosive gases including carbon monoxide (See ICSC 0023, 0074 and 1202). Reacts with strong oxidants and strong acids .
Incompatibility Materials to Avoid	Data for 100% Dodecyl Sulfate, Sodium Salt: Strong oxidants and strong acids .
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 Data for 100% Dodecyl Sulfate, Sodium Salt: LD50 Rat 977 mg/Kg bw (Acutely Toxic)
LD50 Dermal Data for 100% Dodecyl Sulfate, Sodium Salt: LD50 Rabbit 580 mg/Kg bw (Acutely toxic)
LC50 Inhalation Not Available

Chronic Toxicity

Carcinogenicity Not Applicable
Irritation Data for 100% Dodecyl Sulfate, Sodium salt: Risk Phrases - R36/37/38 Irritating to eyes, respiratory system and skin; R 21/22 Harmful in contact with skin and if swallowed
Corrosivity Not Applicable
Sensitization Data for 100% Dodecyl Sulfate, Sodium salt: May produce Allergic sensitivity reactions
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% Dodecyl Sulfate, Sodium Salt: Fish (Fundulus heteroclitus) Static 96hr LC50 1.2 mg/L (Slightly harmful in the aquatic environment or are otherwise designed for biocidal action)
Persistence/Degradability Data for 100% Dodecyl Sulfate, Sodium Salt: Rapidly degradable
Mobility in Environmental Media Not Available
Bioaccumulation/Accumulation Data for 100% Dodecyl Sulfate, Sodium Salt: Fish (Proterorhinus marmoratus 240 day 15°C 4 mg/L BCF 7.15 (Not bioaccumulative)

13. DISPOSAL MEASURES

Waste Disposal Method: Data for 100% Dodecyl Sulfate, Sodium Salt: Personal protection: particulate filter adapted to the airborne concentration of the substance. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Do NOT let this chemical enter the environment.

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 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 g 2.C1.

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

State Right to Know Act

Chemical Name	Dodecyl Sulfate, Sodium Salt
Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
New York	Not Listed
Rhode Island	Not Listed

International Inventories

Chemical Name	Dodecyl Sulfate, Sodium Salt
TSCA	Listed
DSL	Listed
NDSL	Not Listed
EINECS	Listed
ELINCS	Not Listed
CHINA	Listed
KECL	Listed
JAPAN:	Listed

MSDS #: 10184

50-85-00

50-85-02

ABTS® Peroxidase Stop Solution

AICS

Listed

EU Regulations

Annex I Index# Not Available

Classification Not Available

Risk Phrases Not Available

Safety Phrases Not Available

Symbols and Indications of Danger Not Available

Specific Concentration Limits Not Available

Export and Import Data for 100% Dodecyl Sulfate, Sodium Salt: This substance is not listed in the Annex I of Regulation (EC) No 689/2008.

European Priority List Data for 100% Dodecyl Sulfate, Sodium Salt : 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.