

Safety Data Sheet



Revision Date: 7/31/2014

HistoMark® TrueBlue Kit

SDS #: SDS-10148-02

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

HistoMark® TrueBlue Kit

Product Code

54-78-00

Kit Components:

| | |
|-------------------------------|----------|
| TrueBlue Peroxidase Substrate | 71-00-65 |
| HISTO Blocking Solution | 71-00-10 |
| Orcein Solution | 71-01-00 |

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



Orcein Counterstain

SDS #: SDS-10054

Rev. Number: 2 Rev. Date: Jul 14, 2016

1. PRODUCT AND COMPANY IDENTIFICATION

| | |
|--|---|
| Product Description: Orcein Counterstain | Product Code 71-01-01 71-01-00 |
|--|---|

Hazardous Reagent
None

Hazardous Reagent Product code
None

Recommended Use: Reagent

Contact Manufacturer: KPL Inc., A SeraCare Company
910 Clopper Road
Gaithersburg, Maryland 20878
USA

Phone #: 1-301-591-8200
US Toll Free: (800) 676-1881

Fax #: 1-301-948-0169

Web: www.kpl.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 |
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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.

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| | |
|-------------------------------------|-----------------------|
| Hazard statements | Non-regulated product |
| Precautionary statements | Non-regulated product |
| 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 |

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

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)

In accordance Regulation (EC) No 1272/2008, this product is not classified.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Component</u> | <u>CHEMICAL</u> | <u>% Weight</u> | <u>CAS #:</u> | <u>Classification according to EC No. 1272/2008 and GHS - US</u> |
|---------------------|-----------------|-----------------|---------------|--|
| Orcein Counterstain | Orcein | 0.2 gm% | 1400-62-0 | N/A |
| | Acetic Acid | 4.1% | 64-19-7 | EINECS: 200-580-7 |
| | | | | Index number: 607-002-00-6 RTECS: AF 1225000 |
| | Citric Acid | 0.95 gm% | 5949-29-1 | N/A |
| | Water | ~95% | N/A | N/A |

4. FIRST AID MEASURES

| | |
|-----------------------------|---|
| General Advice: | Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. |
| Oral Exposure: | If swallowed and symptoms occur, consult a doctor. |
| Inhalation Exposure: | Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. |
| Skin Exposure: | Generally the product does not impact the skin. |
| Eye Exposure: | Rinse with copious amounts of water for several minutes. |

5. FIRE FIGHTING MEASURES

| | |
|--|---|
| Extinguishing media: | CO ₂ , powder or water spray. Fight larger fires with water spray or alcohol resistant foam. |
| Unusual Fire and Explosive Hazards: | Not Available |
| Flash Point: | Not Available |

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Auto ignition 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 and full protective gear to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with skin, eyes and clothing.**Environmental Precautions:** Do not allow to enter sewers / surface or ground water.**Method of Containment:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated materials as waste according to section 13. Ensure adequate ventilation. Dispose of the material collected according to regulations.**Methods of Clean-up:** See Method of Containment above.**Other Information:** Not Available

7. HANDLING AND STORAGE

Handling: None required. Ensure good ventilation / exhaustion at the workspace. Prevent the formation of aerosols.**Storage:** Store at room temperature. Separate from strong oxidants.

8. EXPOSURE CONTROL

Respiratory Protection: None required. Ensure good ventilation / exhaustion at the workspace. Prevent the formation of aerosols.**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: Dark red liquid**Physical State:** Liquid**Odor:** Odorless**Odor Threshold:** Not Determined**pH:** Not Available**Boiling Point:** 100 °C**Evaporation Rate:** Not Available**Vapor Density:** Not Available**Vapor Pressure:** 23 hPa (17mm Hg)**Relative Density:** Not Available**Auto-Ignition Temperature:** Product is not self-igniting**Water Solubility:** Dilutable**Flammability:** Not Available

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| | |
|-------------------------------|---|
| Flash Point: | Not Available |
| Viscosity: | Not Available |
| Oxidizing Properties: | Not Available |
| Explosive Properties: | Not Available |
| Additional Parameters: | See Datasheet/Product Insert for other Product Information. |

10. STABILITY AND REACTIVITY

| | |
|--|--|
| Chemical Stability: | Stable under normal conditions |
| Conditions to avoid: | Not Available |
| Incompatibility Materials to Avoid: | No further relevant information available. |
| Hazardous Decomposition Products: | No dangerous decomposition products known. |
| Hazardous Polymerization: | Will not occur |
| Possibility of hazardous reactions: | No dangerous reactions known |

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.

64-19-7 Acetic Acid

| | |
|---------------------|---------------------|
| LD50 Oral: | 3310 mg/kg (rat) |
| LD50 Dermal: | 1112 mg/kg (rabbit) |

Inhalation

| | |
|--------------------|--------------------|
| LC50 / 4 h: | 11.4 mg/L (rat) |
| LC50 / 96 h | >1000 mg/L (Trout) |

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 |

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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: | Smaller amounts can be disposed of with household waste. Observe all Federal, State and Local environmental regulations. |
| Contaminated Packaging: | Smaller amounts can be disposed of with household waste. Observe all Federal, State and Local environmental regulations. |
| US EPA Waste Number: | Not Available |

14. TRANSPORTATION MEASURES

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

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 Listed

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals Not Listed

State Right to Know Act

Chemical Name Acetic Acid

Massachusetts: Not Listed

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Rev. Number: 2 Rev. Date: Jul 14, 2016

| | |
|----------------------|------------|
| New Jersey: | Listed |
| Pennsylvania: | Listed |
| New York: | Not Listed |
| Rhode Island: | Not Listed |

International Inventories

| | |
|----------------------|--------------------|
| Chemical Name | Acetic Acid |
| TSCAL: | Listed |
| DSL: | Listed |
| NDSL: | Not Listed |
| EINECS: | Listed |
| CHINA: | Listed |
| KECL: | Listed |
| JAPAN: | Listed |
| AICS: | Listed |

EU Regulations

| | |
|---|--|
| Annex I Index#: | None of the ingredients are listed. |
| 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 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.



Safety Data Sheet

Revision Date: 6/11/2015

SDS # SDS-10325-02

HISTO Blocking Solution

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

HISTO Blocking Solution

Product Code

71-00-10

Hazardous Reagent

HISTO Blocking 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: kplmsds@seracare.com

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

2. HAZARD IDENTIFICATION

Hazard Type

Health

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

GHS Classification

Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318

Hazard Statements:

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary Statements:

P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated

SDS # SDS-10325-02

HISTO Blocking Solution

clothing. Rinse skin with water/ shower.

Symbols and Indications of Danger:GHS05
Dgr: Danger**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> |
|-------------------------|-----------------|-----------------|---------------|
| HISTO Blocking Solution | Periodic Acid | < 4% | 10450-60-9 |

GHS ClassificationSkin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318

4. FIRST AID MEASURES

| | |
|----------------------------|---|
| General Advice | Wash contaminated clothing before reuse. Consult a physician if irritation persists. |
| Oral Exposure | Do Not induce vomiting. 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 | Hydrogen Iodide |
| Flash Point | Not Available |
| Autoignition Temperature | Not Available |

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HISTO Blocking Solution

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 Wear appropriate personal protective clothing to prevent skin contact. Remove: Work clothing that becomes wet should be immediately removed.

Environmental Precautions 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

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 Clear Solution

Physical State Liquid

Odor Not Available

Odor Threshold Not Available

pH <2.0

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

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HISTO Blocking Solution

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 | Strong reducing agents, Powdered metals, Strong bases, Dimethyl Sulfoxide |
| Hazardous Decomposition Products | Carbon Monoxide, Carbon Dioxide, Hydrogen Iodide. |
| 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 |
| 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 | 100% Data for Periodic Acid: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Causes Cough, Shortness of breath, Headache and Nausea. |

12. ECOLOGICAL MEASURES

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

13. DISPOSAL MEASURES

SDS # SDS-10325-02

HISTO Blocking Solution

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: UN number: 3085 Class: 5.1 (8) Packing group: II
 Proper shipping name: Oxidizing solid, corrosive, n.o.s. (Orthoperiodic acid)
 Marine pollutant: No
 Poison Inhalation Hazard: No

IATA: UN number: 3085 Class: 5.1 (8) Packing group: II
 Proper shipping name: Oxidizing solid, corrosive, n.o.s. (Orthoperiodic acid)

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

IMDG (sea): UN number: 3085 Class: 5.1 (8) Packing group: II EMS-No: F-A, S-Q
 Proper shipping name: OXIDIZING SOLID, CORROSIVE, N.O.S. (Orthoperiodic acid)
 Marine pollutant: No

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 q 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)

This product contains no chemical or chemicals which are subject to the reporting requirements of the Clean Air Act, Section 112 HAPS

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: None Listed

State Right to Know Act

| Chemical Name | Periodic Acid |
|---------------|---------------|
|---------------|---------------|

| | |
|---------------|------------|
| Massachusetts | Not Listed |
|---------------|------------|

| | |
|------------|------------|
| New Jersey | Not Listed |
|------------|------------|

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|--------------|------------|
| Pennsylvania | Not Listed |
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|----------|------------|
| New York | Not Listed |
|----------|------------|

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|--------------|------------|
| Rhode Island | Not Listed |
|--------------|------------|

International Inventories

| Chemical Name | Periodic Acid |
|---------------|---------------|
|---------------|---------------|

| | |
|------|--------|
| TSCA | Listed |
|------|--------|

| | |
|-----|--------|
| DSL | Listed |
|-----|--------|

| | |
|------|------------|
| NDSL | Not Listed |
|------|------------|

| | |
|--------|--------|
| EINECS | Listed |
|--------|--------|

| | |
|-------|--------|
| CHINA | Listed |
|-------|--------|

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KECL Listed
 JAPAN: Listed
 AICS Listed

EU Regulations

Annex I Index# Not Available

Classification Skin corrosion (Category 1B), H314
 Serious eye damage (Category 1), H318

Hazard Statements
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.

Precautionary Statements
 P260 Do not breathe dust or mist.
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Symbols and Indications of Danger GHS05
 Dgr: Danger

Specific Concentration Limits Not Available

| |
|------------------------------|
| 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.

Safety Data Sheet



Revision Date: 6/30/2014

TrueBlue Peroxidase Substrate

SDS #: SDS-10145-02

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Description: | Product Code |
|-------------------------------|--------------|
| TrueBlue Peroxidase Substrate | 37-01-09-03 |
| TrueBlue Peroxidase Substrate | 71-00-68 |
| TrueBlue Peroxidase Substrate | 71-00-67 |
| TrueBlue Peroxidase Substrate | 71-00-66 |
| TrueBlue Peroxidase Substrate | 71-00-65 |
| TrueBlue Peroxidase Substrate | 71-00-64 |
| TrueBlue Peroxidase Substrate | 50-78-02 |
| TrueBlue Peroxidase Substrate | 37-01-54 |

Hazardous Reagent

None

Hazardous Reagent Product code

None

Recommended Use Reagent

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

Phone #: 1-301-948-7755

Fax #: 1-301-948-0169

Web: www.kpl.com

Email: kplmsds@seracare.com

Emergency Telephone Numbers:

| | | |
|--|-------------------------------|----------------------------------|
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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 Applicable

Acute Effects: Eye: Not Applicable

SDS #: SDS-10145-02

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> |
|-------------------------------|--------------------|-----------------|---------------|
| TrueBlue Peroxidase Substrate | Dimethyl Sulfoxide | 1% | 67-68-5 |
| | 1,2,6-Hexantriol | 1% | 106-69-4 |

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.
Oral Exposure Rinse mouth
Inhalation Exposure Not Applicable
Skin Exposure Rinse with copious amounts of water
Eye Exposure Rinse with copious amounts of water

5. FIRE FIGHTING MEASURES

Extinguishing media Use extinguishing media appropriate for surrounding fire.
Unusual Fire and Explosive Hazards Not Applicable
Flash Point Not Applicable
Autoignition 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 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 Not Applicable
Method of Containment Containment of spills requires no special equipment or procedures.

SDS #: SDS-10145-02

Methods of Clean-up Clean up of spills requires no special equipment or procedures. Clean with copious amounts of water.

Other Information Not Applicable

7. HANDLING AND STORAGE

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

Storage: Store at room temperature. Separated from strong oxidants.

8. EXPOSURE CONTROL

Respiratory Protection None required if good ventilation is maintained. Otherwise wear MSHA/NIOSH approved respirator suitable for vapor or mist concentrations encountered.

Eye Protection Safety goggles.

Skin Protection Protective gloves. Protective clothing.

Ingestion Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance May appear clear, light blue to light yellow/orange.

Physical State Liquid

Odor Not Applicable

Odor Threshold Not Applicable

pH 5.35 - 5.65

Boiling Point Not Available

Evaporation Rate Not Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

Relative Density Not Available

Auto-Ignition Temperature Not Applicable

Water Solubility Dilutable

Flammability Not Applicable

Flash Point Not Applicable

Viscosity Not Applicable

Oxidizing Properties Not Applicable

Explosive Properties Not Applicable

Additional Parameters See Datasheet for product specific information.

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions

Conditions to avoid Not Available

Incompatibility Materials to Avoid Other strong oxidizing agents, acid chlorides, acid anhydrides.

Hazardous Decomposition Products May produce highly irritating fumes including maleic anhydride.

Hazardous Polymerization Will not occur

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 Applicable |
| Persistence/Degradability | Not Applicable |
| Mobility in Environmental Media | Not Available |
| Bioaccumulation/Accumulation | Not Applicable |

13. DISPOSAL MEASURES

| | |
|--------------------------------|--|
| Waste Disposal Method: | Normal disposal with copious amounts of water. Observe all Federal, State and Local environmental 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: | 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 those as required by 29 CFR 1910.1200 (OSHA HCS).

SARA 313

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

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

Not Listed

State Regulations

California Proposition 65:

This product contains the following Proposition 65 chemicals: Not Listed

State Right to Know Act

| Chemical Name | Dimethyl Sulfoxide | 1,2,6-Hexantriol |
|---------------|--------------------|------------------|
| Massachusetts | Not Listed | Not Listed |
| New Jersey | Listed | Not Listed |
| Pennsylvania | Not Listed | Not Listed |
| New York | Not Listed | Not Listed |
| Rhode Island | Not Listed | Not Listed |

International Inventories

| Chemical Name | Dimethyl Sulfoxide | 1,2,6-Hexantriol |
|---------------|--------------------|------------------|
| TSCA | Listed | Listed |
| DSL | Listed | Not Listed |
| NDSL | Not Listed | Listed |
| EINECS | Listed | Listed |
| CHINA | Listed | Listed |
| KECL | Listed | Listed |
| JAPAN: | Listed | Listed |
| AICS | Listed | 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 |

SDS #: SDS-10145-02

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: 6/30/2014