

Safety Data Sheet



Revision Date: 7/31/2014

SDS #: SDS-10128-02

LumiGLO Reserve™ Chemiluminescent Substrate, 2400 cm²

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

Product Code

LumiGLO Reserve™ Chemiluminescent Substrate, 2400 cm²

54-71-01

LumiGLO Reserve™ Chemiluminescent Substrate, 2400 cm²

54-71-00

LumiGLO Reserve™ Chemiluminescent Substrate, (Sample)

SPL-LGR

Kit Components:

LumiGLO Reserve™ Chemiluminescent
Substrate Solution B

LumiGLO Reserve™ Chemiluminescent 54-69-00
Substrate Solution A

LumiGLO Reserve™ Chemiluminescent 54-69-01
Substrate Solution A

LumiGLO Reserve™ Chemiluminescent 54-70-00
Substrate Solution B

LumiGLO Reserve™ Chemiluminescent 54-70-01
Substrate Solution B

LumiGLO Reserve™ Chemiluminescent SPL-LGR-A
Substrate Solution A (Sample)

LumiGLO Reserve™ Chemiluminescent SPL-LGR-B
Substrate Solution B

20X Wash Solution Concentrate (Imidazole 50-63-00
Buffered Saline with Tween 20)

20X Wash Solution Concentrate (Imidazole 50-63-01
Buffered Saline with Tween 20)

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:

SDS #: SDS-10128-02

LumiGLO Reserve™ Chemiluminescent Substrate, 2400 cm2

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

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: 7/31/2014

SDS # SDS-10129-03

LumiGLO Reserve™ Chemiluminescent Substrate Solution A

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description:

LumiGLO Reserve™ Chemiluminescent Substrate Solution A

Product Code

54-69-00

54-69-02

54-69-01

SPL-LGR-A

Hazardous Reagent

LumiGLO Reserve™ Chemiluminescent 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
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 Health Hazard.

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

GHS Classification

GHS Classification: Acute toxicity, Category 4, oral; H302 | Skin sensitisation, Category 2; H315 | Eye Irrit. 2: H319 | STOT SE 3: H335

Hazard Statements:

H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary Statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/eye protection/face protection.
P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.
 P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Symbols and Indications of Danger:

GHS07
 Warning



Principle Route of Exposure	The substance can be absorbed into the body through skin, eyes and ingestion.
Acute Effects: Eye:	May cause redness and irritation
Acute Effects: Skin:	Irritation may occur
Acute Effects: Inhalation:	Not Applicable
Acute Effects: Ingestion:	May cause Abdominal pain. Dizziness. Headache. Nausea. Vomiting
Chronic Effects:	Contains material which cause damage to the following organs: kidneys, Central Nervous System, liver, Reproductive System, skin and eyes.

Additional Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CHEMICAL</u>	<u>% Weight</u>	<u>CAS #:</u>
LumiGLO Reserve™ Chemiluminescent Substrate Solution A	Proprietary Ingredient 1	<3%	Proprietary (Classified - see classification)
	Proprietary Ingredient 2	<3%	Proprietary (Not Classified)

GHS Classification GHS Classification: Acute toxicity, Category 4, oral; H302 | Skin sensitisation, Category 2; H315 | Eye Irrit. 2: H319 | STOT SE 3: H335

4. FIRST AID MEASURES

General Advice	Wash contaminated clothing before reuse. Consult a physician if irritation persists
Oral Exposure	Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Rest. Refer for medical attention.
Inhalation Exposure	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If discomfort persists, obtain medical attention.
Skin Exposure	Flush with copious amounts of water. Wash contaminated clothing before reuse.
Eye Exposure	Flush with copious amounts of water or eyewash saline for at least 15 minutes

5. FIRE FIGHTING MEASURES

Extinguishing media	Dry Chemical extinguishers, water spray or foam.
Unusual Fire and Explosive Hazards	None special.

Flash Point	Not Available
Autoignition Temperature	Not Applicable
Flammability Statement	Not Flammable
Specific hazards arising from the chemical	Not Applicable
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, eyes and clothing.
Environmental Precautions	No special environmental precautions required. Should not be released into the environment.
Method of Containment	Collect leaking and spilled liquid in sealable containers as far as possible.
Methods of Clean-up	Contain spill and then clean-up 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 2 – 8°C. Keep lid closed tightly.

8. EXPOSURE CONTROL

Respiratory Protection	None required if good ventilation is maintained.
Eye Protection	Safety goggles.
Skin Protection	Industrial strength Neoprene or Nitrile chemical resistant glove. Laboratory apron or equivalent.
Ingestion	Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to light pink, colorless, odorless liquid
Physical State	Liquid
Odor	None
Odor Threshold	Not Available
pH	9.35 - 9.85
Boiling Point	Not Available
Evaporation Rate	Not Available
Vapor Density	Not Available
Vapor Pressure	Not Available
Relative Density	Not Available
Auto-Ignition Temperature	Aqueous
Water Solubility	Not Available
Flammability	Not Flammable
Flash Point	Not Available
Viscosity	Not Available
Oxidizing Properties	Not an Oxidizer
Explosive Properties	Not an Explosive

Additional Parameters

Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to avoid	Protect from direct UV light, avoid elevated temperatures.
Incompatibility Materials to Avoid	Oxidizing agents, combustible materials, organic materials, acids, alkalis and metals.
Hazardous Decomposition Products	None Known
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	Proprietary Ingredient 1: Acute Oral Toxicity (LD50): >3000 mg/kg [rat] Proprietary Ingredient 2: Acute Oral Toxicity (LD50): 4000 mg/kg [rat]
LD50 Dermal	Proprietary Ingredient 2: Acute Dermal Toxicity (LD50): 10626 mg/kg [rabbit]
LC50 Inhalation	Not Available

Chronic Toxicity

Carcinogenicity Not Applicable

Irritation Proprietary Ingredient 1: Skin: Moderate irritant [rabbit]
Skin: Severe irritant [rabbit]
Proprietary Ingredient 2: Eyes: Mild irritant [rabbit]
Eyes: Moderate irritant [rabbit]
Skin: Mild irritant [rabbit]

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 Kidneys, Central Nervous System, Liver, Reproductive System, Skin and Eyes.

Other adverse effects Contains materials which may cause damage to the following organs: Kidneys, Central Nervous System, Liver, Reproductive System, Skin and Eyes.

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. Place contaminated packaging in a break proof outer vessel and dispose on in compliance with national and local 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 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: Not Listed

State Right to Know Act

Chemical Name	Proprietary Ingredient
	1
Massachusetts	Listed
New Jersey	Listed
Pennsylvania	Listed
New York	Listed
Rhode Island	Listed

International Inventories

Chemical Name	Proprietary Ingredient 1
TSCA	Listed
DSL	Listed
NDSL	Not Listed
EINECS	Listed
CHINA	Listed
KECL	Listed
JAPAN:	Listed
AICS	Listed

EU Regulations

Annex I Index#	Not Available
Classification	GHS Classification: Acute toxicity, Category 4, oral; H302 Skin sensitisation, Category 2; H315 Eye Irrit. 2: H319 STOT SE 3: H335
Hazard Statements	H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation.
Precautionary Statements	P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P280: Wear protective gloves/eye protection/face protection. P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Symbols and Indications of Danger	GHS07 Warning
Specific Concentration Limits	Not Available
Export and Import	Not Available
European Priority List	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: 6/27/2014

SDS #: 10133

20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description	Product Code
20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)	50-63-00
	50-63-01
	50-63-03
	50-63-04
	50-63-19
	SPL-WASH

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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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*
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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 Not Hazardous

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

Acute Effects: Eye: May cause redness and irritation

SDS #: 10133

20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)

Acute Effects: Skin: May be absorbed. Dry skin. Redness.
Acute Effects: Inhalation: Not Applicable
Acute Effects: Ingestion: May cause nausea, vomiting and drowsiness
Chronic Effects: Not Applicable
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>
20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)	Not Applicable	Not Applicable	Not Applicable
GHS Classification	Not Applicable: In accordance with Annex II, the product mixture does not meet the criteria for classification as hazardous in accordance with Titles I and II of Regulation (EC) No 1272/2008 as it contains (a) in an individual concentration of < 1 % by weight for non-gaseous mixtures at least one substance posing human health or environmental hazards; or (b) in an individual concentration of < 0.1 % by weight for non-gaseous mixtures at least one substance that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitiser category 1, respiratory sensitiser category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) in accordance with the criteria set out in Annex XIII or very persistent and very bioaccumulative (vPvB) in accordance with the criteria set out in Annex XIII or has been included for reasons other than those referred to in point (a) in the list established in accordance with Article 59(1).		

4. FIRST AID MEASURES

General Advice Not Applicable
Oral Exposure Rinse mouth
Inhalation Exposure Fresh air, rest.
Skin Exposure Clean skin with soap and water. Wash contaminated clothing before reuse.
Eye Exposure Flush with copious amounts of water or eyewash saline for at least 15 minutes.

5. FIRE FIGHTING MEASURES

Extinguishing media In case of fire in the surroundings, use appropriate extinguishing media.
Unusual Fire and Explosive Hazards Not Applicable
Flash Point Not Applicable
Autoignition Temperature Not flammable
Flammability Statement Not flammable

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. Cover with absorbent.

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: Wear appropriate PPE.

Storage: Store at 2 – 8°C.

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 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. Relatively free of particulate matter

Physical State Liquid

Odor Not Applicable

Odor Threshold Not Applicable

pH 7.1 - 7.4

Boiling Point Not Applicable

Evaporation Rate Not Applicable

Vapor Density Not Applicable

Vapor Pressure Not Applicable

Relative Density Not Applicable

Auto-Ignition Temperature Not Applicable

Water Solubility Dilutable

Flammability Not Applicable

Flash Point Not Applicable

Viscosity Not Applicable

SDS #: 10133

20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)

Oxidizing Properties	Not Applicable
Explosive Properties	Not Applicable
Additional Parameters	See Datasheet for more product information.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to avoid	Not Applicable
Incompatibility Materials to Avoid	Not Applicable
Hazardous Decomposition Products	Not Applicable
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 Applicable
Irritation	Not Available
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 Available

12. ECOLOGICAL MEASURES

Ecotoxicity	Not Applicable
Persistence/Degradability	Not Applicable

SDS #: 10133

20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)

Mobility in Environmental Media Not Applicable

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: Not Applicable

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 (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)

N/A

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

SDS #: 10133

20X Wash Solution Concentrate (Imidazole Buffered Saline with Tween 20)

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#

Classification

Not Applicable: In accordance with Annex II, the product mixture does not meet the criteria for classification as hazardous in accordance with Titles I and II of Regulation (EC) No 1272/2008 as it contains

- (a) in an individual concentration of < 1 % by weight for non-gaseous mixtures at least one substance posing human health or environmental hazards; or
- (b) in an individual concentration of < 0.1 % by weight for non-gaseous mixtures at least one substance that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitiser category 1, respiratory sensitiser category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) in accordance with the criteria set out in Annex XIII or very persistent and very bioaccumulative (vPvB) in accordance with the criteria set out in Annex XIII or has been included for reasons other than those referred to in point (a) in the list established in accordance with Article 59(1).

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.