



## HSV 1&2 Reaction Buffer

Section 1. Identification		
GHS product identifier	: HSV 1&2 Reaction Buffer	
Other means of identification	: Not available.	
Product type	: Liquid.	
Code	:	
Identified uses		
For professional use only.		
Supplier/Manufacturer	: Luminex Corporation 12212 Technology Blvd Austin, Texas 78727 Tel: 1-512-381-4397 Toll free: 1-877-785-2323 (US and Canada) Fax: 1-512-219-5114 Email: support@luminexcorp.com	
Emergency telephone number (with hours of operation)	: 1-512-381-4397 24/7	
Section 2. Hazar	ds identification	
OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the	

Classification of the substance or mixture : Not classified.   GHS label elements : No signal word.   signal word : No signal word.   Hazard statements : No known significant effects or critical hazards.   Precautionary statements : Not applicable.   Prevention : Not applicable.   Storage : Not applicable.   Disposal : Not applicable.   Hazards not otherwise classified (HNOC) Physical hazards not otherwise classified (HNOC)   Physical hazards not otherwise classified (HNOC) : None known.   Health hazards not otherwise classified (HNOC) : None known.		Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
GHS label elements Signal word : No signal word.   Hazard statements : No known significant effects or critical hazards.   Precautionary statements : Not applicable.   Prevention : Not applicable.   Response : Not applicable.   Storage : Not applicable.   Disposal : Not applicable.   Hazards not otherwise classified (HNOC) Hone known.   Physical hazards not otherwise classified (HNOC) : None known.   Health hazards not otherwise classified : None known.		: Not classified.
Signal word: No signal word.Hazard statements: No known significant effects or critical hazards.Precautionary statements:Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Hazards not otherwise classified: None known.otherwise classified: None known.Health hazards not: None known.otherwise classified: None known.	substance or mixture	
Hazard statements : No known significant effects or critical hazards.   Precautionary statements : Not applicable.   Prevention : Not applicable.   Response : Not applicable.   Storage : Not applicable.   Disposal : Not applicable.   Hazards not otherwise classified (HNOC) Physical hazards not otherwise classified (PHNOC)   Health hazards not otherwise classified : None known.   otherwise classified : None known.	GHS label elements	
Precautionary statements   Prevention : Not applicable.   Response : Not applicable.   Storage : Not applicable.   Disposal : Not applicable.   Hazards not otherwise classified (HNOC)   Physical hazards not otherwise classified (PHNOC) : None known.   Health hazards not otherwise classified : None known.	Signal word	: No signal word.
Prevention : Not applicable.   Response : Not applicable.   Storage : Not applicable.   Disposal : Not applicable.   Hazards not otherwise classified (HNOC)   Physical hazards not otherwise classified : None known.   Health hazards not otherwise classified : None known.	Hazard statements	: No known significant effects or critical hazards.
Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Hazards not otherwise classified (HNOC)Physical hazards not otherwise classified (PHNOC): None known.Health hazards not otherwise classified: None known.	Precautionary statements	
Storage : Not applicable.   Disposal : Not applicable.   Hazards not otherwise classified (HNOC)   Physical hazards not : None known.   otherwise classified (PHNOC)   Health hazards not : None known.   otherwise classified : None known.	Prevention	: Not applicable.
Disposal : Not applicable.   Hazards not otherwise classified (HNOC)   Physical hazards not : None known.   otherwise classified .   (PHNOC) .   Health hazards not : None known.   otherwise classified .   None known. .	Response	: Not applicable.
Hazards not otherwise classified (HNOC)   Physical hazards not : None known.   otherwise classified   (PHNOC)   Health hazards not : None known.   otherwise classified   otherwise classified	Storage	: Not applicable.
Physical hazards not : None known.   otherwise classified : None known.   (PHNOC) : None known.   Health hazards not : None known.   otherwise classified : None known.	Disposal	: Not applicable.
otherwise classified (PHNOC) Health hazards not : None known. otherwise classified	Hazards not otherwise clas	ssified (HNOC)
otherwise classified	otherwise classified	: None known.
	otherwise classified	: None known.



# Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification

: Mixture

: Not available.

### **CAS number/other identifiers**

**CAS** number

: Not applicable.

Ingredient name	%	CAS number
Potassium Chloride	1 - 5	7447-40-7
2,2'-(Propane-1,3-Diyldiimino)Bis[2-(Hydroxymethyl)Propane-1,3-Diol]	1 - 5	64431-96-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### **Description of necessary first aid measures**

Eye contact	: Not applicable.
Inhalation	: Not applicable.
Skin contact	: Not applicable.
Ingestion	: Not applicable.

### Most important symptoms/effects, acute and delayed

Potential acute health effects				
Eye contact	No known significant effects or critical hazards.			
Inhalation	No known significant effects or critical hazards.			
Skin contact	No known significant effects or critical hazards.			
Ingestion	No known significant effects or critical hazards.			
Over-exposure signs/symptoms				
Eye contact	No known significant effects or critical hazards.			
Inhalation	: No known significant effects or critical hazards.			
Skin contact	No known significant effects or critical hazards.			
Ingestion	No known significant effects or critical hazards.			

<u>ssary</u>

See toxicological information (Section 11)



# Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: No special measures are required.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Document No. :** 

For non-emergency personnel	: Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: No special requirements.

### Methods and materials for containment and cleaning up

Spill : Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

# Section 7. Handling and storage

Precautions for safe handling			
Protective measures	1	Put on appropriate personal protective equipment (see Section 8).	
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.	
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store at -15°C to -30°C.	

**Respiratory protection** 

# Section 8. Exposure controls/personal protection

-					
Control parameters					
United States					
Occupational exposure limit	ts				
None.					
<u>Canada</u>	<u>Canada</u>				
Occupational exposure lim	its				
None.					
Appropriate engineering controls	:	No special ventilation requirements.			
Environmental exposure controls	:	No special measures required.			
Individual protection measur	res				
Hygiene measures	:	Follow good industrial hygiene practice.			
Eye/face protection	:	Not required under normal conditions of use.			
Skin protection					
Hand protection	:	Not required under normal conditions of use.			
Body protection	:	Not required under normal conditions of use.			
Other skin protection	:	Not required under normal conditions of use.			

: Not required under normal conditions of use.

# Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid. [Clear.]
Color	: Yellow to amber. [Light]
Odor	: Odorless.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: Not available.
Flash point	: Not applicable.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not applicable.
Lower and upper explosive (flammable) limits	: Not applicable.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Not available.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not applicable.
Viscosity	: Not available.



Volatility

## **Section 9. Physical and chemical properties**

: Not available.

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

## Information on toxicological effects

Acute toxicity				
Product/ingredient name	Result	Species	Dose	Exposure
Potassium Chloride	LD50 Oral	Rat	2600 mg/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Potassium Chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-

## Sensitization

There is no data available.

#### **Carcinogenicity**

There is no data available.

#### Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
2,2'-(Propane-1,3-Diyldiimino)Bis[2-(Hydroxymethyl)Propane-1,3-Diol]	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

Information on the likely	: Dermal contact. Eye contact. Inhalation. Ingestion.
· · · · · · · · · · · · · · · · · · ·	

#### routes of exposure Potential acute health effects

i otentiai acute nealtii enects		
Eye contact	: No known significant effects or critical hazards.	
Inhalation	: No known significant effects or critical hazards.	



# Section 11. Toxicological information

Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

## Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

## Delayed and immediate effects and also chronic effects from short and long term exposure

: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
<u>ects</u>
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.
: No known significant effects or critical hazards.

## Numerical measures of toxicity

## Acute toxicity estimates

Route	ATE value
Oral	139784.9 mg/kg

# Section 12. Ecological information

## **Toxicity**

Product/ingredient name	Result	Species	Exposure
Potassium Chloride	Acute EC50 1337000 µg/L Fresh water Acute EC50 9.24 g/L Fresh water Acute EC50 83000 µg/L Fresh water Acute LC50 9.68 mg/L Fresh water Acute LC50 880000 µg/L Fresh water	Algae - Navicula seminulum Algae - Desmodesmus subspicatus Daphnia - Daphnia magna Crustaceans - Pseudosida ramosa - Neonate Fish - Pimephales promelas	96 hours 72 hours 48 hours 48 hours 96 hours

## Persistence and degradability

There is no data available.

## **Bioaccumulative potential**

## Section 12. Ecological information

There is no data available.

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>)

- : Not available.
- Other adverse effects : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. No specific disposal consideration.

## Section 14. Transport information

	DOT	TDG	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-		-
Environmental hazards	No.	No.	No.	No.
Additional information	-	-	-	-

**AERG** : Not applicable.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

## Section 15. Regulatory information

U.S. Federal regulations	: United States inventory (TSCA 8b): Not determined.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed
Clean Air Act Section 602 Class II Substances	: Not listed



# Section 15. Regulatory information

DEA List I Chemicals Precursor Chemicals)	: Not listed						
EA List I Chemicals Precursor Chemicals)	: Not listed						
ARA 302/304							
Composition/information o	n ingredients						
No products were found.							
SARA 304 RQ	: Not applicable.						
ARA 311/312							
Classification	: Not applicat	ole.					
Composition/information o	n ingredients						
Name	%	Fir ha	zard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Potassium Chloride 2,2'-(Propane-1,3-Diyldiimino)Bis[2-	- 1- 1-			No. No.	No. No.	Yes. Yes.	No. No.

(Hydroxymethyl)Propane-1,3-Dividiimino)Bis[2

### SARA 313

No products were found.

#### **State regulations**

**New York** 

None of the components are listed.None of the components are listed.

- **New Jersey**
- : None of the components are listed.
- Pennsylvania
- : None of the components are listed.

## California Prop. 65

No products were found.

#### Canada

<u>Canadian lists</u>	
Canadian NPRI	: None of the components are listed.
CEPA Toxic substances	: None of the components are listed.
Canada inventory	: Not determined.

## Section 16. Other information

#### **History**

Date of issue mm/dd/yyyy	: 11/15/2015
Version	: 1
Prepared by	: KMK Regulatory Services Inc.

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.