

SAFETY DATA SHEET

Muse MitoPotential Assay Kit

Section 1. Identification

GHS product identifier	:	Muse MitoPotential Assay Kit
Other means of identification	:	4700-1580 Muse Mitopotential Reagent 4700-1585 Muse Mitopotential 7-AAD 4700-1330 1X Assay Buffer
Product type	:	Liquid.
Code	:	
Identified uses	:	For Professional use only. Use as per Product Insert.
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 http://www.luminexcorp.com
e-mail address of person responsible for this SDS	:	Support@Luminexcorp.com
Emergency telephone number (with hours of operation)	:	1-512-381-4397 24/7

Section 2. Hazards identification

OSHA/HCS status	:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	:	FLAMMABLE LIQUIDS - Category 4
<u>GHS label elements for the kit</u>		
Signal word	:	Warning
Hazard statements	:	H227 - Combustible liquid.
<u>Precautionary statements</u>		
Prevention	:	P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from flames and hot surfaces. - No smoking.
Response	:	Not applicable.
Storage	:	P403 - Store in a well-ventilated place. P235 - Keep cool.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<u>GHS label elements by compartment</u>		
Hazard statements	:	4700-1580 H227 - Combustible liquid. 4700-1585 No known significant effects or critical hazards. 4700-1330 No known significant effects or critical hazards.

Precautionary statements



Section 2. Hazards identification

Prevention	: 4700-1580	P280 - Wear protective gloves. Wear eye or face protection.
	4700-1585	P210 - Keep away from flames and hot surfaces. - No smoking.
	4700-1330	Not applicable.
Response	: 4700-1580	Not applicable.
	4700-1585	Not applicable.
	4700-1330	Not applicable.
Storage	: 4700-1580	P403 - Store in a well-ventilated place.
	4700-1585	P235 - Keep cool.
	4700-1330	Not applicable.
Disposal	: 4700-1580	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	4700-1585	Not applicable.
	4700-1330	Not applicable.
Hazards not otherwise classified	: None known.	

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

There are no 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	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.
Inhalation	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.
Skin contact	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.
Ingestion	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: No known significant effects or critical hazards.
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Section 4. First aid measures

- 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.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician : None identified.
- Specific treatments : No specific treatment.
- Protection of first-aiders : No special measures required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media : Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 - carbon dioxide
 - carbon monoxide
 - sulfur oxides
 - halogenated compounds
 - metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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

- 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** : 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.
4700-1580: Store at -15°C to -25°C.
4700-1585, 4700-1330: Store at 2°C to 8°C.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Canada

Occupational exposure limits

None.

Appropriate engineering controls : No special ventilation requirements.

Environmental exposure controls : No special measures required.

Individual protection measures

- 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.
- Respiratory protection** : Not required under normal conditions of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : **4700-1580** Liquid. [Clear.]
4700-1585 Liquid. [Clear.]
4700-1330 Liquid. [Clear.]
- Color** : **4700-1580** Colorless.
4700-1585 Colorless to light red.
4700-1330 Colorless.
- Odor** : **4700-1580** No strong odor.
4700-1585 No strong odor.
4700-1330 No strong odor.
- Odor threshold** : Not available.

Section 9. Physical and chemical properties

pH	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Melting point	: Not available.	
Initial boiling point and boiling range	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Flash point	: 4700-1580	Closed cup: 87°C (188.6°F)
	4700-1585	Not available.
	4700-1330	Not available.
Evaporation rate	: Not available.	
Flammability (solid, gas)	: Not available.	
Lower and upper explosive (flammable) limits	: Not available.	
Vapor pressure	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Vapor density	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Relative density	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Solubility	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Partition coefficient: n-octanol/water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Viscosity	: 4700-1580	Not available.
	4700-1585	Not available.
	4700-1330	Not available.
Flow time (ISO 2431)	: Not available.	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.	
Chemical stability	: 4700-1580	The product is stable.
	4700-1585	The product is stable.
	4700-1330	The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: 4700-1580	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
	4700-1585	No specific data.
	4700-1330	No specific data.

Section 10. Stability and reactivity

Incompatible materials	: 4700-1580	Reactive or incompatible with the following materials: oxidizing materials.
	4700-1585	Reactive or incompatible with the following materials: oxidizing materials.
	4700-1330	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

There is no data available.

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.
Inhalation	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.
Skin contact	: 4700-1580	No known significant effects or critical hazards.
	4700-1585	No known significant effects or critical hazards.
	4700-1330	No known significant effects or critical hazards.

Section 11. Toxicological information

- Ingestion** : **4700-1580** No known significant effects or critical hazards.
- : **4700-1585** No known significant effects or critical hazards.
- : **4700-1330** 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

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

- Soil/water partition coefficient (K_{oc})** : Not available.

Muse MitoPotential Assay Kit


Section 12. Ecological information

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 Classification	TDG Classification	IMDG	IATA
UN number	4700-1580 NA1993	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	4700-1580 COMBUSTIBLE LIQUID, N.O.S.	-	-	-
Transport hazard class(es)	4700-1580 3 	-	-	-
Packing group	4700-1580 III	-	-	-
Environmental hazards	4700-1580 No. 4700-1585 No. 4700-1330 No.	4700-1580 No. 4700-1585 No. 4700-1330 No.	4700-1580 No. 4700-1585 No. 4700-1330 No.	4700-1580 No. 4700-1585 No. 4700-1330 No.

AERG : 4700-1580 128

Additional information

TDG Classification : 4700-1580 -
4700-1585 -
4700-1330 -

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.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) PAIR:** All components are listed or exempted.
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.
TSCA 12(b) one-time export: None of the components are listed.
TSCA 12(b) annual export notification: None of the components are listed.
Clean Water Act (CWA) 307: None of the components are listed.
Clean Water Act (CWA) 311: Disodium hydrogenorthophosphate; Disodium phosphate heptahydrate

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

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

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : FLAMMABLE LIQUIDS - Category 4

SARA 313

There is no data available.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: Dimethyl sulfoxide

Pennsylvania : None of the components are listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

Canadian lists

Canada inventory (DSL NDSL) : Not determined.

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Ingredient name	List name	Status
Not listed.		

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
4700-1580 FLAMMABLE LIQUIDS - Category 4	On basis of test data

History

Date of issue mm/dd/yyyy : 05/15/2019

Date of previous issue : Not applicable

Version : 1

Prepared by : KMK Regulatory Services Inc.

Section 16. Other information

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Notice to reader

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