03/02/2022	Kit Components	
Product code	Description	
V8782	P450-Glo [™] CYP2C8 Assay, 50ml	
Components:		
V859	Luciferin Detection Reagent	
V865	Reconstitution Buffer	
V862	Luciferin-ME	



Printing date 03/02/2022

Reviewed on 03/01/2022

1 Identification

Product identifier Trade name: Luciferin Detection Reagent

Article number: V859 Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A.1-800-356-9526 or (608)-274-4330 SDS author: chemicalregulatory@promega.com

Information department: SDS author: chemicalregulatory@promega.com **Emergency telephone number:** For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable Classification system: NFPA ratings (scale 0 - 4) Health = 0Fire = 0*Reactivity* = 0HMIS-ratings (scale 0 - 4) *Health* = 0Fire = 0*Reactivity* = 0**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):** Not applicable Target Organ(s): Not applicable or unknown **Other hazards** Results of PBT and vPvB assessment **PBT:** Not applicable.

(Contd. on page 2)

US

Printing date 03/02/2022

Reviewed on 03/01/2022

Trade name: Luciferin Detection Reagent

vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of hazardous and non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components: Not applicable

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures

General information: No special measures required. After inhalation: If the patient feels unwell or is concerned, obtain medical advice. After skin contact: Generally the product does not irritate the skin. After eye contact: Rinse opened eye for several minutes under running water. After swallowing: If the patient feels unwell or is concerned, obtain medical advice. Information for doctor: Most important symptoms and effects, both acute and delayed None No further relevant information available. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture None known No further relevant information available. Advice for firefighters No special advice Protective equipment: No special measures required.

6 Accidental release measures

 Personal precautions, protective equipment and emergency procedures Not required.

 Environmental precautions:

 Dilute with plenty of water.

 Do not allow to enter sewers/ surface or ground water.

 Methods and material for containment and cleaning up:

 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

 Reference to other sections

 No dangerous substances are released.

 See Section 7 for information on safe handling.

(Contd. on page 3)

US

Printing date 03/02/2022

Reviewed on 03/01/2022

Trade name: Luciferin Detection Reagent

(Contd. of page 2)

See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling No special measures required. **Information about protection against explosions and fires:** The product is not flammable.

Conditions for safe storage, including any incompatibilities Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light. Information about storage in one common storage facility: Not required. Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment: General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Breathing equipment: Not required. Protection of hands: Not required. Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Eye protection: Not required.

Information on basic physical and General Information	chemical properties	
Appearance:		
Form:	Fluid	
Color: Odor:	Colorless Not determined	
Odor threshold:	Not determined.	
pH-value at 20 °C (68 °F):	7.2	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	

Printing date 03/02/2022

Reviewed on 03/01/2022

Trade name: Luciferin Detection Reagent

		(Contd. of page
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not determined.	
Density at 20 °C (68 °F):	1 g/cm ³ (8.345 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wa		
Viscosity:	, ,	
Dynamic at 20 °C (68 °F):	0.0952 mPas	
Kinematic:	Not determined.	
Solvent separation test		
Organic solvents:	0.0 %	
Water:	99.6 %	
VOC content:	0.00 %	
Other information	No further relevant information available.	

10 Stability and reactivity

Reactivity No further relevant information available. Chemical stability Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No further relevant information available. Incompatible materials: No further relevant information available. Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: No data available Primary irritant effect: on the skin: No irritant effect. on the eye: No irritating effect. Sensitization: In case of skin contact: not sensitising In case of inhalation: not sensitising Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations:

(Contd. on page 5)

US

Printing date 03/02/2022

Reviewed on 03/01/2022

Trade name: Luciferin Detection Reagent

(Contd. of page 4)

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program) None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment Persistence and degradability *Not available* No further relevant information available. **Bioaccumulative potential** Not known No further relevant information available. Mobility in soil No further relevant information available. Ecotoxicological effects: **Remark:** Not available Additional ecological information: General notes: Not known to be hazardous to water. Results of PBT and vPvB assessment **PBT:** Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

4 Transport information		
UN-Number DOT, ADR, ADN, IMDG, IATA	Not hazardous for transportation Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	None Not applicable	
Transport hazard class(es)	None	

Printing date 03/02/2022

Reviewed on 03/01/2022

Trade name: Luciferin Detection Reagent

		(Contd. of page :
DOT, ADR, ADN, IMDG, IATA		
Class	Not applicable	
Packing group	None	
DOT, ADR, IMDG, IATA	Not applicable	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	: II of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	Not applicable	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) Inventory:

Hazardous Air Pollutants

None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

New Jersey Right-to-Know List:

56-81-5 glycerol

Pennsylvania Right-to-Know List:

None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value)

None of the ingredients are listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

(Contd. on page 7)

US

Printing date 03/02/2022

Reviewed on 03/01/2022

Trade name: Luciferin Detection Reagent

(Contd. of page 6)

GHS label elements Not applicable Signal word Not applicable Hazard statements Not applicable Chemical safety assessment

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 chemicalregulatory@promega.com Contact: Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 Toll-Free: (800) 356-9526 chemicalregulatory@promega.com **Date of preparation / last revision** 03/02/2022 / 5.0 Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: Internation Civil Aviation Organization ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit



Printing date 03/02/2022

Reviewed on 03/02/2022

Page 1/9

1 Identification

Product identifier Trade name: <u>Reconstitution Buffer</u>

Article number: V865 Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330 SDS author: chemicalregulatory@promega.com

Information department: SDS author: chemicalregulatory@promega.com Emergency telephone number: For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

GHS08 Health hazard

STOT SE 1 H370 Causes damage to the central nervous system and the visual organs.

GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). *Hazard pictograms*



Signal word Danger

Hazard-determining components of labeling: methanol

(Contd. on page 2)

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

	(Contd. of page 1)
Hazard statements	
Causes serious eye irritation.	
Causes damage to the central nervous system and the visual organs.	
Precautionary statements	
Do not breathe dust/fume/gas/mist/vapors/spray.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Wear eye protection / face protection.	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if	present and easy to do.
Continue rinsing.	
IF exposed: Call a POISON CENTER or doctor/physician.	
If eye irritation persists: Get medical advice/attention.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international re	gulations.
Classification system:	
NFPA ratings (scale 0 - 4)	
Health = 2	
Fire = 0	
Reactivity = 0	
HMIS-ratings (scale 0 - 4)	
Health = *2	
Fire = 0	
Reactivity = 0	
OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable	
Target Organ(s): Not applicable or unknown	
Other hazards	
Results of PBT and vPvB assessment	
PBT: Not applicable.	
vPvB: Not applicable.	

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of hazardous and non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:	
67-56-1 methanol	1-5%
127087-87-0 Nonylphenol Ethoxylate	1-5%

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

(Contd. on page 3)

US

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

(Contd. of page 2)

Information for doctor: Most important symptoms and effects, both acute and delayed None No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 *Fire-fighting measures*

Extinguishing media Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture None known No further relevant information available. Advice for firefighters No special advice

6 Accidental release measures

Personal precautions, protective equipment and emergency proceduresRemove persons from danger area.Wear protective clothing.Environmental precautions:Dilute with plenty of water.Do not allow to enter sewers/ surface or ground water.Methods and material for containment and cleaning up:Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).Reference to other sectionsNo dangerous substances are released.See Section 7 for information on safe handling.See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling No special precautions are necessary if used correctly. **Information about protection against explosions and fires:** The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light. **Information about storage in one common storage facility:** Not required. **Further information about storage conditions:** None. **Specific and use(s)** No further relevant information available.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

(Contd. on page 4)

US

Printing date 03/02/2022

*

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

Melting point/Melting range:

Boiling point/Boiling range: Flash point:

Flammability (solid, gaseous): Decomposition temperature:

At th	is time, the remaining constitue	(Contd. of page 3) (Contd. of page 3)
67-56	6-1 methanol	
PEL	Long-term value: 260 mg/m ³ ,	200 ppm
REL	Short-term value: 325 mg/m³, Long-term value: 260 mg/m³, . Skin	
TLV	Short-term value: 250 ppm Long-term value: 200 ppm Skin; BEI	
Ingre	edients with biological limit va	lues:
67-56	6-1 methanol	
	15 mg/L Medium: urine Time: end of shift Parameter: Methanol (backgro	nund nonspecific)
	·	hat were valid during the creation were used as basis.
Select It is 1 89/68 Mate The s varie of the	recommended that the selecte 86/EEC and the standard EN 3 9 rial of gloves 9 selection of the suitable gloves 9 s from manufacturer to manuf 9 glove material can not be calo	g penetration time, rate of diffusion and degradation time. In protective gloves be tested and approved under NIOSH or EU Directive 74 derived from it. does not only depend on the material, but also on further marks of quality and facturer. As the product is a preparation of several substances, the resistance culated in advance and has therefore to be checked prior to the application. eye protection tested and approved under government NIOSH standards.
Phys	sical and chemical prope	rties
Gene	rmation on basic physical and eral Information	chemical properties
For	rarance: rm·	Fluid
-	lor:	Colorless
Odor		Not determined
Odor	threshold:	Not determined.
pH-v	alue at 20 °C (68 °F):	8.4
	ige in condition	Undetermined

Undetermined.

100 °C (212 °F) Not applicable. Not applicable.

Not determined.

(Contd. on page 5)

US

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

	(Contd. of page 4
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	1.014 g/cm ³ (8.46183 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent separation test	
Organic solvents:	2.4 %
Water:	91.6 %
VOC content:	2.40 %
Solids content:	3.8 %
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available. Chemical stability Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No further relevant information available. Incompatible materials: No further relevant information available. Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: No data available Primary irritant effect: on the skin: Causes skin irritation. on the eye: No data available. Sensitization: In case of skin contact: not sensitising In case of inhalation: not sensitising In case of inhalation: not sensitising Additional toxicological information: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

(Contd. on page 6)

US

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

(Contd. of page 5)

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program) None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment Persistence and degradability *Not available* No further relevant information available. **Bioaccumulative potential** Not known No further relevant information available. Mobility in soil No further relevant information available. Ecotoxicological effects: **Remark:** Not available Additional ecological information: General notes: No data available. Results of PBT and vPvB assessment **PBT:** Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

UN-Number	Not hazardous for transportation	
DOT, ADR, ADN, IMDG, IATA	Not applicable	
UN proper shipping name	None	
DOT, ADR, ADN, IMDG, IATA	Not applicable	

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

		(Contd. of page
DOT, ADR, ADN, IMDG, IATA		
Class	Not applicable	
Packing group	None	
DOT, ADR, IMDG, IATA	Not applicable	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	: II of	
MARPOL73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	Not applicable	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

67-56-1 methanol

127087-87-0 Nonylphenol Ethoxylate

TSCA (Toxic Substances Control Act) Inventory:

All ingredients are listed.

Hazardous Air Pollutants

67-56-1 methanol

Proposition 65

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

67-56-1 methanol

New Jersey Right-to-Know List:

67-56-1 methanol

Pennsylvania Right-to-Know List:

None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value)

None of the ingredients are listed.

(Contd. on page 8)

US -

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

(Contd. of pag	ge 7)
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients are listed.	
GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS) Signal word Danger).
Hazard-determining components of labeling: methanol	
Hazard statements	
Causes serious eye irritation.	
Causes damage to the central nervous system and the visual organs.	
Precautionary statements	
Do not breathe dust/fume/gas/mist/vapors/spray.	
Wash thoroughly after handling.	
Do not eat, drink or smoke when using this product.	
Wear eye protection / face protection.	
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to a	do.
Continue rinsing.	
IF exposed: Call a POISON CENTER or doctor/physician.	
If eye irritation persists: Get medical advice/attention.	
Store locked up.	
Dispose of contents/container in accordance with local/regional/national/international regulations. Chemical safety assessment	
Water harand class, Water harand class 1 (Solf assessment); slightly harandous for water	

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 chemicalregulatory@promega.com Contact: Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 Toll-Free: (800) 356-9526 chemicalregulatory@promega.com Date of preparation / last revision 03/02/2022 / 7.0 Abbreviations and acronyms: ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

(Contd. on page 9)

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Reconstitution Buffer

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent DD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A STOT SE 1: Specific target organ toxicity (single exposure) – Category I (Contd. of page 8)



Printing date 03/02/2022

Reviewed on 03/02/2022

1 Identification

Product identifier Trade name: Luciferin-ME

Article number: V862 Application of the substance / the mixture For Laboratory Use

Details of the supplier of the safety data sheet Manufacturer/Supplier:

Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A.1-800-356-9526 or (608)-274-4330 SDS author: chemicalregulatory@promega.com

Information department: SDS author: chemicalregulatory@promega.com **Emergency telephone number:** For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable Classification system: NFPA ratings (scale 0 - 4) Health = 0Fire = 0*Reactivity* = 0HMIS-ratings (scale 0 - 4) *Health* = 0Fire = 0*Reactivity* = 0**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):** Not applicable Target Organ(s): Not applicable or unknown **Other hazards Results of PBT and vPvB assessment PBT:** Not applicable.

(Contd. on page 2)

US

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Luciferin-ME

vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description:

The product is made up of a mixture of hazardous and non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components: Not applicable

Additional information: For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures

General information: No special measures required. After inhalation: If the patient feels unwell or is concerned, obtain medical advice. After skin contact: Generally the product does not irritate the skin. After eye contact: Rinse opened eye for several minutes under running water. After swallowing: If the patient feels unwell or is concerned, obtain medical advice. Information for doctor: Most important symptoms and effects, both acute and delayed None No further relevant information available. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Special hazards arising from the substance or mixture None known No further relevant information available. Advice for firefighters No special advice Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.
Environmental precautions: Dilute with plenty of water.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Reference to other sections
No dangerous substances are released.
See Section 7 for information on safe handling.
See Section 13 for disposal information.

(Contd. on page 3)

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Luciferin-ME

(Contd. of page 2)

7 Handling and storage

Handling:

Precautions for safe handling No special measures required. **Information about protection against explosions and fires:** The product is not flammable.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Do not store below -20°C. Protected from light. Information about storage in one common storage facility: Not required. Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment: General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Breathing equipment: Not required. Protection of hands: Not required. Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and

varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. **Eye protection:** Not required.

Information on basic physical and	chemical properties	
General Information	1 1	
Appearance:		
Form:	Fluid	
Color:	Colorless	
Odor:	Not determined	
Odor threshold:	Not determined.	
pH-value at 20 °C (68 °F):	5.5	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Luciferin-ME

	(Contd. of page 3
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	1.005 g/cm³ (8.38673 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water	r): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent separation test	
Water:	<i>99.7 %</i>
VOC content:	0.00 %
Solids content:	0.1 %
Other information	No further relevant information available.

10 Stability and reactivity

Reactivity No further relevant information available. Chemical stability Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions No dangerous reactions known. Conditions to avoid No further relevant information available. Incompatible materials: No further relevant information available. Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects Acute toxicity: LD/LC50 values that are relevant for classification: No data available Primary irritant effect: on the skin: No irritant effect. on the eye: No irritating effect. Sensitization: In case of skin contact: not sensitising In case of inhalation: not sensitising Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations:

(Contd. on page 5)

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Luciferin-ME

(Contd. of page 4)

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program) None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: Not harmful to the aquatic environment Persistence and degradability *Not available* No further relevant information available. **Bioaccumulative potential** Not known No further relevant information available. Mobility in soil No further relevant information available. Ecotoxicological effects: **Remark:** Not available Additional ecological information: General notes: Not available. Not known to be hazardous to water. Results of PBT and vPvB assessment **PBT:** Not applicable. vPvB: Not applicable. Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

4 Transport information		
UN-Number	Not hazardous for transportation	
DOT, ADR, ADN, IMDG, IATA	Not applicable	
UN proper shipping name	None	
DOT, ADR, ADN, IMDG, IATA	Not applicable	

Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Luciferin-ME

		(Contd. of page :
Transport hazard class(es)	None	
DOT, ADR, ADN, IMDG, IATA		
Class	Not applicable	
Packing group	None	
DOT, ADR, IMDG, IATA	Not applicable	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex	II of	
MARPOL 73/78 and the IBC Code	Not applicable.	
UN "Model Regulation":	Not applicable	

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

TSCA (Toxic Substances Control Act) Inventory:

Hazardous Air Pollutants

None of the ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

New Jersey Right-to-Know List:

None of the ingredients are listed.

Pennsylvania Right-to-Know List:

None of the ingredients are listed.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value)

None of the ingredients are listed.

(Contd. on page 7)

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Printing date 03/02/2022

Reviewed on 03/02/2022

Trade name: Luciferin-ME

(Contd. of page 6)

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

GHS label elements Not applicable Signal word Not applicable Hazard statements Not applicable

National regulations: No information available

Water hazard class: Generally not hazardous for water. *Chemical safety assessment:* A Chemical Safety Assessment has not been carried out.

16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing SDS:

Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 chemicalregulatory@promega.com Contact: Promega Corporation Chemical Regulatory Department 2800 Woods Hollow Road Madison, WI Ph:(608)274-4330 Toll-Free: (800) 356-9526 chemicalregulatory@promega.com **Date of preparation / last revision** 03/02/2022 / 2.0 Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit