10/28/2020	Kit Components
Product code	Description
V9102	ADP-Glo TM Kinase Assay, 10,000 Assays
Components:	
V911	ADP-Glo [™] Enzyme
V912	ADP-Glo [™] Reagent
V913	Kinase Detection Buffer
V914A	Kinase Detection Substrate, (2ml)
V915	Ultra Pure ATP, 10mM
V916	ADP, 10mM



Printing date 10/28/2020

Reviewed on 10/26/2020

1 Identification Product identifier Trade name: <u>ADP-Glo™ Enzyme</u> Article number: V911 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

Information department:

SDS author: ChemicalRegulatory@promega.com Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330 **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 = 1*Reactivity* = 0HMIS-ratings (scale 0 - 4) *Health* = 1Fire = 1 Reactivity = 0**OSHA Hazard Overview (Criteria according to 29CFR1910.1200):** Not applicable Target Organ(s): May cause Kidney damage (Nephrotoxin)

(Contd. on page 2)

Page 1/7

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: ADP-GloTM Enzyme

(Contd. of page 1)

25-50%

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 non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:

56-81-5 glycerol

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).

(Contd. on page 3)

US

(Contd. of page 2)

Safety Data Sheet acc. to OSHA HCS

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: ADP-GloTM Enzyme

Reference to other sections

No 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 measures required. **Information about protection against explosions and fires:** No special measures required.

Conditions for safe storage, including any incompatibilities Storage: Requirements to be met by storerooms and receptacles: No special requirements. 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:

56-81-5 glycerol

PEL Long-term value: 15* 5** mg/m³

mist; *total dust **respirable fraction

TLV TLV withdrawn-insufficient data human occup. exp.

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.

9 Physical and chemical properties

Information on basic physical and chemical propertiesGeneral InformationAppearance:Form:FluidColor:ColorlessOdor:Not determinedOdor threshold:Not determined.

(Contd. on page 4)

US

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: ADP-GloTM Enzyme

		(Contd. of page
pH-value at 20 °C (68 °F):	7.5	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	> 100 °C (> 212 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	400 °C (752 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	0.9 Vol %	
Upper:	0.0 Vol %	
Vapor pressure at 20 °C (68 °F):	0.1 hPa	
Density at 20 °C (68 °F):	1.153 g/cm³ (9.62179 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.	
Organic solvents:	50.0 %	
Water:	49.2 %	
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.

(Contd. on page 5)

[–] US

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: ADP-GloTM Enzyme

(Contd. of page 4)

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

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 available* No further relevant information available. 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.

14 Transport information

UN-Number

Not hazardous for transportation

US

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: ADP-Glo[™] Enzyme

		(Contd. of page 2
DOT, ADR, ADN, IMDG, IATA	Not applicable	
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	None Not applicable	
Transport hazard class(es)	None	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, ADR, IMDG, IATA	None Not applicable	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of 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:

56-81-5 glycerol

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.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

(Contd. on page 7)

⁻ US

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: ADP-GloTM Enzyme

(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: 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 Date of preparation / last revision 10/28/2020 / 1.0 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 européen sur le transport 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 ACGIH: American Conference of Governmental Industrial Hygienists 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 * Data compared to the previous version altered.



Printing date 10/28/2020

Reviewed on 10/22/2020

1	Ident	ifica	ation
		- J	

Product identifier Trade name: <u>ADP-Glo™ Reagent</u>

Article number: V912 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

Information department:

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

Page 1/7

(Contd. on page 2)

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP-Glo[™] Reagent

(Contd. of page 1)

1-5%

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 non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:

1185-53-1 Tris HCl

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.

(Contd. on page 3)

⁻ U

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP-Glo[™] 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: No special requirements. 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 Appearance:	chemical properties	
Form:	Fluid	
Color:	Colorless	
Odor:	Not determined	
Odor threshold:	Not determined.	
<i>pH-value at 20 °C (68 °F):</i>	7.5	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP-Glo[™] Reagent

	(Contd. of p	oage
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/wate	er): Not determined.	
Viscosity:	, ,	
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Organic solvents:	0.7 %	
Water:	98.0 %	
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: No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

(Contd. on page 5)

US

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP-Glo™ Reagent

(Contd. of page 4)

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 available* No further relevant information available. 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.

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	
Transport hazard class(es)	None	

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP-GloTM Reagent

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

1185-53-1 Tris HCl

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.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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

(Contd. on page 7)

US

Printing date 10/28/2020

Trade name: ADP-Glo[™] Reagent

Reviewed on 10/22/2020

(Contd. of page 6)

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 Date of preparation / last revision 10/28/2020 / 1.0 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 européen sur le transport 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 ACGIH: American Conference of Governmental Industrial Hygienists 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 * Data compared to the previous version altered.



Printing date 10/28/2020

Reviewed on 10/26/2020

Product identifier Trade name: Kinase Detection Buff	or
Article number: V913 Application of the substance / the m	—
Details of the supplier of the safety o Manufacturer/Supplier:	lata sheet
Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330	
Information department: SDS author: ChemicalRegulatory@p Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330 Emergency telephone number: For Chemical Emergency Spill, Lea and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-5.	k, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA

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* = *0= 0 Fire *Reactivity* = 0OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Environmental Hazard Target Organ(s): Not applicable or unknown (Contd. on page 2)

Page 1/7

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: Kinase Detection Buffer

(Contd. of page 1)

1-5%

1-5%

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 non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:

9002-92-0 Polyethylene glycol 400 dodecyl ether

1119-94-4 Dodecyltrimethylammonium bromide

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

In the case of fire, wear respiratory protective equipment and chemical protective suit.

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required. **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

(Contd. on page 3)

Printing date 10/28/2020

Reviewed on 10/26/2020

(Contd. of page 2)

Trade name: Kinase Detection Buffer

Inform respective authorities in case of seepage into water course or sewage system. 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** 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 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: No special requirements. **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.

9 Physical and chemical properties

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Fluid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.

(Contd. on page 4)

US

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: Kinase Detection Buffer

	(Contd. of page
pH-value at 20 °C (68 °F):	8
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
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:	Not determined.
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.
Water:	85.9 %
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: No sensitizing effects known.

(Contd. on page 5)

US

Printing date 10/28/2020

Reviewed on 10/26/2020

(Contd. of page 4)

Trade name: Kinase Detection Buffer

Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

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 available* No further relevant information available. 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: Harmful to fish Additional ecological information: General notes: Not known to be hazardous to water. Harmful to aquatic organisms 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.

(Contd. on page 6)

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: Kinase Detection Buffer

(Contd. of page 5)

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	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable	
Packing group DOT, ADR, IMDG, IATA	None Not applicable	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex L MARPOL 73/78 and the IBC Code	Transport in bulk according to Annex II ofMARPOL 73/78 and the IBC CodeNot 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:

9002-92-0 Polyethylene glycol 400 dodecyl ether

1119-94-4 Dodecyltrimethylammonium bromide

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.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

(Contd. on page 7)

US

Printing date 10/28/2020

Reviewed on 10/26/2020

Trade name: Kinase Detection Buffer

(Contd. of page 6)

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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: 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 Data of preparation (Jact registion 10/28/2020

Date of preparation / last revision 10/28/2020 / 1.0

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 européen sur le transport 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 ACGIH: American Conference of Governmental Industrial Hygienists 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 * Data compared to the previous version altered.



Printing date 10/28/2020

Reviewed on 10/22/2020

1 Identification

Product identifier Trade name: <u>Kinase Detection Substrate</u>, (2ml)

Article number: V914A 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

Information department:

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

Page 1/7

(Contd. on page 2)

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Kinase Detection Substrate, (2ml)

(Contd. of page 1)

5-10%

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 non-hazardous components. The exact concentration percentages and components name may be withheld as a Promega Corp. trade secret.

Dangerous components:

125572-95-4 trans-1,2-Diaminocyclohexane-N,N,N',N'-tetraacetic acid monohydrate

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).

(Contd. on page 3)

US

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Kinase Detection Substrate, (2ml)

Reference to other sections

No 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 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: No special requirements. 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		
Appearance:		
Form:	Fluid	
Color:	Colorless	
Odor:	Not determined	
Odor threshold:	Not determined.	
pH-value at 20 °C (68 °F):	6	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	

(Contd. of page 2)

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Kinase Detection Substrate, (2ml)

		(Contd. of page
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
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):	1.014 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/wat	ter): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Water:	4.8 %	
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: No sensitizing effects known. 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 10/28/2020

Reviewed on 10/22/2020

Trade name: Kinase Detection Substrate, (2ml)

(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 available* No further relevant information available. 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.

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 10/28/2020

Reviewed on 10/22/2020

Trade name: Kinase Detection Substrate, (2ml)

		(Contd. of page 5
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	
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.

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.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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

(Contd. on page 7)

US

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Kinase Detection Substrate, (2ml)

(Contd. of page 6)

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 Date of preparation / last revision 10/28/2020 / 1.0 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 européen sur le transport 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 ACGIH: American Conference of Governmental Industrial Hygienists 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 * Data compared to the previous version altered.



Printing date 10/28/2020

Reviewed on 10/22/2020

<u>1 Ia</u>	lentij	ficat	ion

Product identifier Trade name: <u>Ultra Pure ATP, 10mM</u>

Article number: V915 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

Information department:

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

Page 1/7

(Contd. on page 2)

US

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Ultra Pure ATP, 10mM

(Contd. of page 1)

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 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.

(Contd. on page 3)

US

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Ultra Pure ATP, 10mM

(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: No special requirements. 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:	Colorless	
Odor:	Not determined	
Odor threshold:	Not determined.	
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 10/28/2020

Reviewed on 10/22/2020

Trade name: Ultra Pure ATP, 10mM

	(Contd. of J	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 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/w	ater): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Water:	99.4 %	
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: No sensitizing effects known. Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations:

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.

(Contd. on page 5)

JS –

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Ultra Pure ATP, 10mM

(Contd. of page 4)

US

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: *Not available* No further relevant information available. 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.

14 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 Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA Not applicable Class Not applicable

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Ultra Pure ATP, 10mM

		(Contd. of page 5
Packing group DOT, ADR, IMDG, IATA	None Not applicable	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Ann MARPOL73/78 and the IBC Code	ex II of 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:

All ingredients are listed.

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.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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.

(Contd. on page 7)

US

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: Ultra Pure ATP, 10mM

(Contd. of page 6)

<u>16 Other information</u>

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 Date of preparation / last revision 10/28/2020 / 1.0 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 européen sur le transport 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 ACGIH: American Conference of Governmental Industrial Hygienists 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 * Data compared to the previous version altered.



Printing date 10/28/2020

Reviewed on 10/22/2020

1 Id	enti	ficati	on	
_				

Product identifier Trade name: <u>ADP, 10mM</u>

Article number: V916 *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

Information department:

SDS author: ChemicalRegulatory@promega.com Promega Corporation 2800 Woods Hollow Road Madison, WI 53711 U.S.A. 1-800-356-9526 or (608)-274-4330 **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 (Contd. on page 2)

Page 1/7

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP, 10mM

(Contd. of page 1)

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 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 sectionsNo dangerous substances are released.See Section 7 for information on safe handling.

(Contd. on page 3)

US

(Contd. of page 2)

Safety Data Sheet acc. to OSHA HCS

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP, 10mM

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: No special requirements. 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 Appearance:	chemical properties	
Form:	Fluid	
Color:	Colorless	
Odor:	Not determined	
Odor threshold:	Not determined.	
<i>pH-value at 20 °C (68 °F):</i>	7.5	
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.	

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP, 10mM

	(Contd.	of page 2
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/w		
Viscosity:	,	
Dynamic:	Not determined.	
Kinematic:	Not determined.	
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: No sensitizing effects known. Additional toxicological information: The product is not subject to classification according to internally approved calculation methods for preparations:

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.

(Contd. on page 5)

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP, 10mM

(Contd. of page 4)

US

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological information

Toxicity

Aquatic toxicity: *Not available* No further relevant information available. 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.

14 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 Transport hazard class(es) None DOT, ADR, ADN, IMDG, IATA Not applicable Class Not applicable (Contd. on page 6) (Contd. on page 6)

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP, 10mM

		(Contd. of page 5)
Packing group DOT, ADR, IMDG, IATA	None Not applicable	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL 73/78 and the IBC Code	II of 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.

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.

Cancerogenity categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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.

(Contd. on page 7)

US

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Printing date 10/28/2020

Reviewed on 10/22/2020

Trade name: ADP, 10mM

(Contd. of page 6)

<u>16 Other information</u>

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 Date of preparation / last revision 10/28/2020 / 1.0 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 européen sur le transport 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 ACGIH: American Conference of Governmental Industrial Hygienists 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 * Data compared to the previous version altered.