02/23/2024	Kit Components
Product code	Description

AL3128C	AlphaLISA Human PD-1 and PD-L2 Binding Kit (500
	points)

# Components:

AL128A	Anti-6xHis Acceptor Beads
AL3128SB	AlphaLISA Biotinylated hPD-1
AL3128S	AlphaLISA His-tagged hPD-L2
6760002	Streptavidin Donor Beads
AL018C	AlphaLISA Binding Assay Buffer



Printing date 02/23/2024 Reviewed on 05/18/2023

## 1 Identification

- · Product identifier
- · Trade name: Anti-6xHis Acceptor Beads
- · Product number:

AL128A, AL128AC, AL128AF, AL178C, AL128M, AL128R, AL128C, AL178AHV, AL178AF, AL178AC, AL178R, AL178M

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

## 2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· Additional information: For the wording of the listed H phrases refer to section 16.

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





GHS07

GHS09

- · Signal word Warning
- Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

Wear protective gloves / 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.

(Contd. on page 2)

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: Anti-6xHis Acceptor Beads

(Contd. of page 1)

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0 Reactivity = 0

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one

< 0.1%

#### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

*In case of unconsciousness place patient stably in side position for transportation.* 

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed 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: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

#### 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.

Inform respective authorities in case of seepage into water course or sewage system.

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).

Dispose contaminated material as waste according to section 13.

(Contd. on page 3)

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: Anti-6xHis Acceptor Beads

(Contd. of page 2)

*Ensure adequate ventilation.* 

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:	
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	$0.6 \text{ mg/m}^3$
7778-77-0 potassium dihydrogenorthophosphate	$9.6 \text{ mg/m}^3$
· PAC-2:	
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	6.6 mg/m³
7778-77-0 potassium dihydrogenorthophosphate	110 mg/m³
· PAC-3:	
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	$40 \text{ mg/m}^3$
7778-77-0 potassium dihydrogenorthophosphate	$630 \text{ mg/m}^3$

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- 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 containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

# 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · 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.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

(Contd. on page 4)

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: Anti-6xHis Acceptor Beads

(Contd. of page 3)

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

Information on basic physical and c	hemical properties	
General Information	• •	
Appearance:		
Form:	Fluid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	N/A	
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.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	

(Contd. on page 5)

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Trade name: Anti-6xHis Acceptor Beads

		(Contd. of page
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/w	ater): Not determined.	
· Viscosity:		
<i>Dynamic at 20 °C (68 °F):</i>	0.952 mPas	
Kinematic:	Not determined.	
· Solvent content:		
Water:	99.0 %	
VOC content:	0.00 %	
Solids content:	0.0 %	
· 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:
- Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

	· IARC	(International	Agency for	Research	on Cancer)
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None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- US

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Trade name: Anti-6xHis Acceptor Beads

(Contd. of page 5)

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Remark: Toxic for fish
- · Other information: N/A
- · 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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport informat	ion
-----------------------	-----

· UN-Number · ADR, IMDG, IATA	UN3082
· UN proper shipping name	
$\cdot ADR$	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	LIQUID, N.O.S. (CYANOGEN BROMIDE)
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S. (CYANOGEN BROMIDE), MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S. (CYANOGEN BROMIDE)

- · Transport hazard class(es)
- · ADR, IMDG, IATA



· Class	9 Miscellaneous dangerous substances and articles
· Label	9

- · Packing group
- · ADR, IMDG, IATA

(Contd. on page 7)

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Trade name: Anti-6xHis Acceptor Beads

	(Contd. of pag
Environmental hazards:	
Marine pollutant:	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances and articles
Hazard identification number (Kemler code)	: 90
EMS Number:	F- $A$ , $S$ - $F$
Segregation groups	(SGG6) Cyanides
Stowage Category	A
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
<i>IMDG</i>	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANC
-	LIQUID, N.O.S. (CYANOGEN BROMIDE), 9, III

# 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· ·	xtremely hazardous substances):	
None of the ing	gredients is listed.	
Section 313 (S	pecific toxic chemical listings):	
None of the ing	gredients is listed.	
TSCA (Toxic S	Substances Control Act):	
7732-18-5 W	<sup>r</sup> ater	ACTIVI
26172-55-4 5-	-chloro-2-methyl-2H-isothiazol-3-one	ACTIVI
	isodium hydrogenorthophosphate	ACTIVI
7558-79-4 di		
	otassium dihydrogenorthophosphate	ACTIVI
7778-77-0 pc	, , ,	ACTIVI ACTIVI

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Trade name: Anti-6xHis Acceptor Beads

(Contd. of page 7)

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value)

None of the ingredients is listed.

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

None of the ingredients is listed.

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

## 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Date of preparation / last revision 02/23/2024
- · 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)

NFPA: National Fire Protection Association (USA)

VOC: Volatile Organic Compounds (USA, EU)

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

Skin Irritation 2: Skin corrosion/irritation - Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Printing date 02/23/2024 Reviewed on 05/18/2023

## 1 Identification

· Product identifier

· Trade name: AlphaLISA Biotinylated hPD-1

· Product number: AL3128SB

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

### 2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· Additional information: For the wording of the listed H phrases refer to section 16.

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





GHS07

7 GHS09

- · Signal word Warning
- · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

*Wear protective gloves / 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.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

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# Safety Data Sheet acc. to OSHA HCS

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Trade name: AlphaLISA Biotinylated hPD-1

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0Reactivity = 0

# 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one

<0.1%

### 4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed 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: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · **Protective equipment:** Wear self-contained respiratory protective device.

#### 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.

Inform respective authorities in case of seepage into water course or sewage system.

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).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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Trade name: AlphaLISA Biotinylated hPD-1

(Contd. of page 2)

#### · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

<i>PAC-1</i> :		
77-86-1	TRIS	18 mg/m³
7647-01-0	hydrochloric acid	1.8 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	0.6 mg/m
· PAC-2:		
77-86-1	TRIS	190 mg/m
7647-01-0	hydrochloric acid	22 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	6.6 mg/m <sup>2</sup>
· PAC-3:		
77-86-1	TRIS	1,200 mg/m
7647-01-0	hydrochloric acid	100 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	$40 \text{ mg/m}^3$

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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 containers: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · 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.

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

(Contd. on page 4)

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Biotinylated hPD-1

· Respiratory protection:

(Contd. of page 3)

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Vapor pressure at 20 °C (68 °F):

General Information		
Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
pH-value:	N/A	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	

23 hPa (17.3 mm Hg)

(Contd. on page 5)

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Trade name: AlphaLISA Biotinylated hPD-1

		(Contd. of page	
· Density:	Not determined.		
· Relative density	Not determined.		
· Vapor density	Not determined.		
· Evaporation rate	Not determined.		
· Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix.		
· Partition coefficient (n-octanol/wa	<b>iter):</b> Not determined.		
· Viscosity:			
Dynamic:	Not determined.		
Kinematic:	Not determined.		
· Solvent content:			
Water:	49.0 %		
VOC content:	0.00 %		
Solids content:	5.5 %		
· 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:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
7647-01-0 hydrochloric acid	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
	(Contd. on page 6)

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Trade name: AlphaLISA Biotinylated hPD-1

(Contd. of page 5)

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Remark: Toxic for fish
- · Other information: N/A
- · 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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number		
· ADR, IMDG, IATA	not regulated	
· UN proper shipping name · ADR, IMDG, IATA	not regulated	
Transport hazard class(es)		
· ADR, ADN, IMDG, IATA		
· Class	not regulated	
· Packing group		
· ADR, IMDG, IATA	not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
· Transport in bulk according to Annex	: II of	
MARPOL73/78 and the IBC Code	Not applicable.	

(Contd. on page 7)

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Trade name: AlphaLISA Biotinylated hPD-1

(Contd. of page 6)

· UN "Model Regulation": not regulated

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 355	(extremely	hazardous	substances	):

7647-01-0 hydrochloric acid

· Section 313 (Specific toxic chemical listings):

7647-01-0 hydrochloric acid

TSCA (Toxic Substances Control Act):			
7732-18-5	Water	ACTIVE	
9004-54-0	Dextran	ACTIVE	
7647-14-5	sodium chloride	ACTIVE	
77-86-1	TRIS	ACTIVE	
9048-46-8	Bovine Serum Albumin	ACTIVE	
7647-01-0	hydrochloric acid	ACTIVE	
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	ACTIVE	

#### · Hazardous Air Pollutants

7647-01-0 hydrochloric acid

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value)

7647-01-0 hydrochloric acid

A4

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

None of the ingredients is listed.

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

# 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a

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Trade name: AlphaLISA Biotinylated hPD-1

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warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

#### · Contact:

· Date of preparation / last revision 02/23/2024

#### · Abbreviations and acronvms:

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) VOC: Volatile Organic Compounds (USA, EU)

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

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

- US

Printing date 02/23/2024 Reviewed on 05/18/2023

## 1 Identification

· Product identifier

· Trade name: AlphaLISA His-tagged hPD-L2

· Product number: AL3128S

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

### 2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· Additional information: For the wording of the listed H phrases refer to section 16.

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





GHS07

GHS09

- · Signal word Warning
- · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

Wear protective gloves / 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.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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(Contd. of page 1)

# Safety Data Sheet acc. to OSHA HCS

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA His-tagged hPD-L2

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

# 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one

<0.1%

### 4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed 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: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.

#### 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.

Inform respective authorities in case of seepage into water course or sewage system.

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).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

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Trade name: AlphaLISA His-tagged hPD-L2

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#### · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

<i>PAC-1</i> :		
77-86-1	TRIS	18 mg/m³
7647-01-0	hydrochloric acid	1.8 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	0.6 mg/m
· PAC-2:		
77-86-1	TRIS	190 mg/m
7647-01-0	hydrochloric acid	22 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	6.6 mg/m <sup>2</sup>
· PAC-3:		
77-86-1	TRIS	1,200 mg/m
7647-01-0	hydrochloric acid	100 ppm
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	$40 \text{ mg/m}^3$

## 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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 containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · 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.

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

(Contd. on page 4)

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Trade name: AlphaLISA His-tagged hPD-L2

Respiratory protection:

(Contd. of page 3)

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

# 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

*Color:* According to product specification

Odor: CharacteristicOdor threshold: Not determined.

· pH-value: N/A

· Change in condition

· Flammability (solid, gaseous):

**Melting point/Melting range:** Undetermined. **Boiling point/Boiling range:** 100 °C (212 °F)

· Flash point: Not applicable.

· Decomposition temperature: Not determined.

• Ignition temperature: Product is not selfigniting.

• Danger of explosion: Product does not present an explosion hazard.

Not applicable.

· Explosion limits:

Lower: Not determined. Upper: Not determined.

• Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

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Trade name: AlphaLISA His-tagged hPD-L2

		(Contd. of page	
· Density:	Not determined.		
· Relative density	Not determined.		
· Vapor density	Not determined.		
· Evaporation rate	Not determined.		
· Solubility in / Miscibility with			
Water:	Not miscible or difficult to mix.		
· Partition coefficient (n-octanol/wo	<b>iter):</b> Not determined.		
· Viscosity:			
Dynamic:	Not determined.		
Kinematic:	Not determined.		
· Solvent content:			
Water:	49.0 %		
VOC content:	0.00 %		
Solids content:	5.5 %		
· 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:
- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
7647-01-0 hydrochloric acid	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
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Trade name: AlphaLISA His-tagged hPD-L2

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#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Remark: Toxic for fish
- · Other information: N/A
- · 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:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number ADR, IMDG, IATA	not regulated
UN proper shipping name ADR, IMDG, IATA	not regulated
Transport hazard class(es)	
ADR, ADN, IMDG, IATA Class	not regulated
Packing group ADR, IMDG, IATA	not regulated
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.

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Trade name: AlphaLISA His-tagged hPD-L2

(Contd. of page 6)

· UN "Model Regulation": not regulated

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 355	(extremely	hazardous	substances):
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7647-01-0 hydrochloric acid

· Section 313 (Specific toxic chemical listings):

7647-01-0 hydrochloric acid

· TSCA (Toxi	ic Substances Control Act):	
7732-18-5	Water	ACTIVE
9004-54-0	Dextran	ACTIVE
7647-14-5	sodium chloride	ACTIVE
77-86-1	TRIS	ACTIVE
9048-46-8	Bovine Serum Albumin	ACTIVE
	hydrochloric acid	ACTIVE
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	ACTIVE

#### · Hazardous Air Pollutants

7647-01-0 hydrochloric acid

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

7647-01-0 hydrochloric acid

A4

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

None of the ingredients is listed.

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

# 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA His-tagged hPD-L2

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warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

#### · Contact:

· Date of preparation / last revision 02/23/2024

#### · 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)

NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU)

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

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation - Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

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## 1 Identification

- · Product identifier
- · Trade name: Streptavidin Donor Beads
- · **Product number:** 6760002, 6760002B
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Revvity, Inc 549 Albany Street

Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

## 2 Hazard(s) identification

· Classification of the substance or mixture

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· Additional information: For the wording of the listed H phrases refer to section 16.

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





GHS07

GHS09

· Signal word Warning

· Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

Wear protective gloves.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0

Reactivity = 0

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Trade name: Streptavidin Donor Beads

(Contd. of page 1)

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:

26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one

<0.1%

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

*In case of unconsciousness place patient stably in side position for transportation.* 

- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- · Most important symptoms and effects, both acute and delayed 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: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

### 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.

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:	
7365-45-9 HEPES Free Acid	30 mg/m³
9003-53-6 POLYSTYRENE	85 mg/m³
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	$0.6 \text{ mg/m}^3$

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Trade name: Streptavidin Donor Beads

	(Contd. of page 2
· PAC-2:	
7365-45-9 HEPES Free Acid	$330 \text{ mg/m}^3$
9003-53-6 POLYSTYRENE	550 mg/m <sup>3</sup>
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	6.6 mg/m <sup>3</sup>
· PAC-3:	
7365-45-9 HEPES Free Acid	2,000 mg/m <sup>3</sup>
9003-53-6 POLYSTYRENE	4,700 mg/m <sup>3</sup>
26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one	40 mg/m³

### 7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

- · 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 containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

# 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · 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.

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Respiratory protection:

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (Contd. on page 4)

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Trade name: Streptavidin Donor Beads

· Material of gloves

(Contd. of page 3)

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.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

Information on basic physical and c	hemical properties	
General Information		
Appearance:		
Form:	Fluid	
Color: Odor:	According to product specification Characteristic	
Odor threshold:	Not determined.	
pH-value:	N/A	
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.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Water:	98.3 %	

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: Streptavidin Donor Beads		
		(Contd. of page 4)
Solids content:	0.6 %	
· 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:
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
9003-53-6 POLYSTYRENE	3
· NTP (National Toxicology Program)	
None of the ingredients is listed.	
· OSHA-Ca (Occupational Safety & Health Administration)	
None of the ingredients is listed.	

# 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Remark: Toxic for fish
- · Other information: N/A
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

(Contd. on page 6)

Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: Streptavidin Donor Beads

· Other adverse effects No further relevant information available.

(Contd. of page 5)

# 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number	
ADR, IMDG, IATA	UN3082
UN proper shipping name	
ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE
IMDC	LIQUID, N.O.S. (CYANOGEN BROMIDE)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIL N.O.S. (CYANOGEN BROMIDE), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIL
	N.O.S. (CYANOGEN BROMIDE)
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	9 Miscellaneous dangerous substances and articles
Label	9
Packing group	
ADR, IMDG, IATA	III
Environmental hazards:	
Marine pollutant:	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances and articles
Hazard identification number (Kemler code):	
EMS Number:	F-A,S-F
Segregation groups	(SGG6) Cyanides
Stowage Category	A

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Trade name: Streptavidin Donor Beads

· Transport/Additional information:	(Contd. of page
· ADR	
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· <i>IMDG</i>	
· Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	LIQUID, N.O.S. (CYANOGEN BROMIDE), 9, III

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 355	(extremely hazardous substances):	

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxi	ic Substances Control Act):	
7732-18-5	Water	ACTIVE
7365-45-9	HEPES Free Acid	ACTIVE
7647-14-5	sodium chloride	ACTIVE
9003-53-6	POLYSTYRENE	ACTIVE
26172-55-4	5-chloro-2-methyl-2H-isothiazol-3-one	ACTIVE

#### · Hazardous Air Pollutants

None of the ingredients is listed.

- Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

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Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: Streptavidin Donor Beads

(Contd. of page 7)

· TLV (Threshold Limit Value)

None of the ingredients is listed.

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

None of the ingredients is listed.

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

### 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Contact:
- · Date of preparation / last revision 02/23/2024
- · 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)

NFPA: National Fire Protection Association (USA)

VOC: Volatile Organic Compounds (USA, EU)

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

Sensitization - Skin 1: Skin sensitisation - Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

- US

Printing date 02/23/2024 Reviewed on 05/18/2023

## 1 Identification

- · Product identifier
- · Trade name: AlphaLISA Binding Assay Buffer
- · Product number: AL018C, AL018F
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

### 2 Hazard(s) identification

· Classification of the substance or mixture

The product has been classified and is not hazadous according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 0Reactivity = 0

# 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

### 4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

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Trade name: AlphaLISA Binding Assay Buffer

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· Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

## 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: No special measures required.
- · 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 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:	
77-86-1 TRIS	$18 \text{ mg/m}^3$
· PAC-2:	
77-86-1 TRIS	$190 \text{ mg/m}^3$
· PAC-3:	
77-86-1 TRIS	$1,200 \text{ mg/m}^3$

#### 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 containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see section 7.

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(Contd. of page 2)

- · 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.

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

Information on basic physical and c	chemical properties	
General Information		
Appearance: Form:	Fluid	
Color:	Colorless	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	N/A	
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.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1 g/cm³ (8.345 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	

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Trade name: AlphaLISA Binding Assay Buffer

		(Contd. of page
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/we	ater): Not determined.	
· Viscosity:		
<i>Dynamic at 20 °C (68 °F):</i>	0.952 mPas	
Kinematic:	Not determined.	
· Solvent content:		
Water:	99.5 %	
VOC content:	0.00 %	
Solids content:	0.5 %	
· 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:
- · 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:

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.

· Carcinogenic categories

#### · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

-US

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## 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects: N/A
- · Other information: N/A
- · 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:

Must be specially treated adhering to official regulations.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information	
· UN-Number · ADR, IMDG, IATA	not regulated
· UN proper shipping name · ADR, IMDG, IATA	not regulated
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA · Class	not regulated
· Packing group · ADR, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
· 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 regulated

#### 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

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Printing date 02/23/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Binding Assay Buffer

(Contd. of page 5)

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

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

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NFPA: National Fire Protection Association (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

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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

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