

# Biotin-SP-conjugated AffiniPure VHH Fragment Alpaca Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Mouse, and Rabbit Serum Proteins)



## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 10/11/2022

Version: 3.1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product Form : Mixture  
Product Name : Biotin-SP-conjugated AffiniPure VHH Fragment Alpaca Anti-Human IgG (H+L)  
(minimal cross-reaction to Bovine, Mouse, and Rabbit Serum Proteins)  
Product Code : 609-064-213

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : For in vitro research use only. Not for diagnostic or therapeutic use. This is not a medical device. Contact supplier for specific applications.

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Jackson ImmunoResearch Laboratories, Inc.  
872 West Baltimore Pike  
West Grove, PA 19390  
T: 800-367-5296, 610-869-4024  
F: 610-869-0171  
tech@jacksonimmuno.com  
www.jacksonimmuno.com

#### European Contact

Jackson ImmunoResearch Europe LTD  
Cambridge House  
St Thomas' Place  
Ely, Cambridgeshire CB7 4EX, UK  
T: +44 (0) 1638 782616  
F: +44 (0) 1353 664675  
info@jacksonimmuno.com  
help@jacksonimmuno.com

Email address for the person responsible for this SDS:  
tech@jacksonimmuno.com

### 1.4. Emergency telephone number

Emergency number : +1-610-869-4024 (USA)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification According to Regulation (EC) No. 1272/2008 [CLP]

Aquatic Chronic3 H412

Full text of hazard classes and H-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

Labelling According to Regulation (EC) No. 1272/2008 [CLP]

Hazard statements (CLP) H412 - Harmful to aquatic life with long lasting effects.  
Precautionary statements (CLP) P273 - Avoid release to the environment.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.  
EUH-statements EUH032 - Contact with acids liberates very toxic gas.

### 2.3. Other hazards

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Other hazards not contributing to the classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	Classification According to Regulation (EC) No.
Sodium Azide	(CAS-No.) 26628-22-8 (EC-No.) 247-852-1, (EC Index-No.), 011-004-00-7	0.54	Acute Tox. 2 (Oral), H300 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Sodium phosphate dibasic	(CAS-No.) 7558-79-4, (EC-No.) 231-448-7	1.5	Not Classified
Biotin-SP-conjugated AffiniPure VHH Fragment Alpaca Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Mouse, and Rabbit Serum Proteins)	(CAS-No.) Not assigned	1.1	Not Classified
Sodium Chloride	(CAS-No.) 7647-14-5 (EC-No.) 231-598-3	15.8	Not Classified
Albumins, blood serum	(CAS-No.) 9048-46-8 (EC-No.) 232-936-2	16.2	Not Classified

Full text of H-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Using proper respiratory protection, move the exposed person to fresh air at once. Immediately call a poison center, physician, or emergency medical service.
- First-aid measures after skin contact : Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.
- First-aid measures after eye contact : Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/effects after inhalation : May be harmful or cause irritation.
- Symptoms/effects after skin contact : Prolonged exposure may cause skin irritation.

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- Symptoms/effects after eye contact : May cause slight irritation to eyes.
- Symptoms/effects after ingestion : Ingestion may cause adverse effects. May be harmful if swallowed.
- Chronic symptoms : None expected under normal conditions of use.

### 4.3. Indication of any immediate medical attention and special treatment needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.  
Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not Assigned
- Reactivity : Sodium azide in water is a weak base. Reacts with copper, lead, silver, mercury, and carbon disulfide to form shock-sensitive compounds. Reacts with acids, forming toxic and explosive hydrogen azide. Contact with acids liberates toxic gas.
- Hazardous decomposition products in case of fire : Hydrogen chloride. Sodium oxides. Nitrogen oxides.

### 5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.
- Firefighting instructions : Use water spray or fog for cooling exposed containers.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid prolonged contact with eyes, skin and clothing.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protective equipment (PPE).
- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

### 6.2. Environmental precautions

- : Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- For containment : Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.
- Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

### 6.4. Reference to other sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures.

**7.2. Conditions for safe storage, including any incompatibilities**

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep container closed when not in use. Store at 2-8°C (35°F - 46.4°F). Keep/Store away from extremely high temperatures and incompatible materials.
- Incompatible materials : Strong acids, strong bases, strong oxidizers. Heavy metals. Halogenated hydrocarbons.

**7.3. Specific end use(s)**

For in vitro research use only. Not for diagnostic or therapeutic use. This is not a medical device. Contact supplier for specific applications.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

<b>Sodium chloride (7647-14-5)</b>		
Latvia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Lithuania	IPRV (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
<b>Sodium azide (26628-22-8)</b>		
EU	IOELV TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
EU	IOELV STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
EU	Notes	Possibility of significant uptake through the skin
Austria	MAK (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Austria	MAK Short time value (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Austria	OEL chemical category (AT)	Skin notation
Belgium	OEL chemical category (BE)	Skin, Skin notation
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Bulgaria	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Croatia	GVI (granicna vrijednost izloženosti) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Croatia	KGVI (kratkotrajna granicna vrijednost izloženosti) (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Croatia	OEL chemical category (HR)	Skin notation
Cyprus	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Cyprus	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Cyprus	OEL chemical category (CY)	Skin-potential for cutaneous absorption
France	VLE (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup> (restrictive limit)
France	VME (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup> (restrictive limit)
France	OEL chemical category (FR)	Risk of cutaneous absorption

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Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	0,2 mg/m <sup>3</sup>
Gibraltar	Eight hours mg/m <sup>3</sup>	0,1 mg/m <sup>3</sup>
Gibraltar	Short-term mg/m <sup>3</sup>	0,3 mg/m <sup>3</sup>
Gibraltar	OEL chemical category (GI)	Skin notation
Greece	OEL TWA (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Greece	OEL TWA (ppm)	0,1 ppm
Greece	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Greece	OEL STEL (ppm)	0,1 ppm
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	0,29 mg/m <sup>3</sup>
USA ACGIH	ACGIH Ceiling (ppm)	0,11 ppm
Italy	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Italy	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Italy	OEL chemical category (IT)	skin - potential for cutaneous absorption
Latvia	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Latvia	OEL chemical category (LV)	skin - potential for cutaneous exposure
Spain	VLA-ED (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup> (indicative limit value)
Spain	VLA-EC (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Spain	OEL chemical category (ES)	skin - potential for cutaneous absorption
Switzerland	KZGW (mg/m <sup>3</sup> )	0,4 mg/m <sup>3</sup> (inhalable dust)
Switzerland	MAK (mg/m <sup>3</sup> )	0,2 mg/m <sup>3</sup> (inhalable dust)
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
United Kingdom	WEL chemical category	Potential for cutaneous absorption
Czech Republic	Expozicní limity (PEL) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Czech Republic	OEL chemical category (CZ)	Potential for cutaneous absorption
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Estonia	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Estonia	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Estonia	OEL chemical category (ET)	Sensitizer, Skin notation
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min)	0,3 mg/m <sup>3</sup>
Finland	OEL chemical category (FI)	Potential for cutaneous absorption
Hungary	AK-érték	0,1 mg/m <sup>3</sup>
Hungary	CK-érték	0,3 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>

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Ireland	OEL (15 min ref) (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Ireland	OEL chemical category (IE)	Potential for cutaneous absorption
Lithuania	IPRV (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Lithuania	TPRV (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Lithuania	OEL chemical category (LT)	Skin notation
Luxembourg	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Luxembourg	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Luxembourg	OEL chemical category (LU)	Possibility of significant uptake through the skin
Malta	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Malta	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Malta	OEL chemical category (MT)	Possibility of significant uptake through the skin
Norway	Grenseverdier (AN) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Norway	Grenseverdier (Korttidsverdi) (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup> (value from the regulation)
Poland	NDS (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Poland	NDSch (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Romania	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Romania	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Romania	OEL chemical category (RO)	Skin notation
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup> (Sodium azide)
Slovakia	NPHV (Hranicná) (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Slovakia	OEL chemical category (SK)	Potential for cutaneous absorption
Slovenia	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Slovenia	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Slovenia	OEL chemical category (SL)	Potential for cutaneous absorption
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup>
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup>
Portugal	OEL TWA (mg/m <sup>3</sup> )	0,1 mg/m <sup>3</sup> (indicative limit value)
Portugal	OEL STEL (mg/m <sup>3</sup> )	0,3 mg/m <sup>3</sup> (indicative limit value)
Portugal	OEL - Ceilings (mg/m <sup>3</sup> )	0,29 mg/m <sup>3</sup>
Portugal	OEL - Ceilings (ppm)	0,11 ppm (vapor)
Portugal	OEL chemical category (PT)	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value

### 8.2. Exposure controls

Appropriate engineering controls

: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure all national/local regulations are observed.

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Personal protective equipment : Gloves. Protective clothing. Protective goggles.



Materials for protective clothing : Chemically resistant materials and fabrics.  
Hand protection : Wear protective gloves.  
Eye and Face Protection : Chemical safety goggles.  
Skin and body protection : Wear suitable protective clothing.  
Respiratory protection : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.  
Other information : When using, do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid  
Colour : Light tan solid  
Odour : Odourless, as water  
Odour threshold : No data available  
pH : 7.6, when rehydrated with indicated volume of H<sub>2</sub>O  
Evaporation rate : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : No data available  
Relative vapour density at 20 °C : No data available  
Relative density : No data available  
Solubility : Water  
Partition coefficient: n-octanol/water : No data available  
Viscosity : No data available  
Explosive properties : No data available  
Oxidising properties : No data available  
Explosive limits : No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Sodium azide in water is a weak base. Reacts with copper, lead, silver, mercury, and carbon disulfide to form shock-sensitive compounds. Reacts with acids, forming toxic and explosive hydrogen azide. Contact with acids liberates toxic gas.

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### 10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Extremely high temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers. Heavy metals. halogenated hydrocarbons.

### 10.6. Hazardous decomposition products

Sodium oxides. Hydrogen chloride gas. Nitrogen oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Sodium chloride (7647-14-5)	
LD50 oral rat	3550 mg/kg (Species: Wistar)
LD50 dermal rabbit	> 10000 mg/kg (Species: New Zealand White)
LC50 inhalation rat (mg/l)	> 42 g/m <sup>3</sup> (Exposure time: 1 h)
Sodium azide (26628-22-8)	
LD50 oral rat	27 mg/kg
LD50 oral	45 mg/kg
LD50 dermal rabbit	20 mg/kg
Sodium phosphate dibasic (7558-79-4)	
LD50 oral rat	17 g/kg
LD50 dermal rat	>500 mg/kg (50% solution)

Skin corrosion/irritation	: Not classified pH: 7,6 when rehydrated with indicated volume of H <sub>2</sub> O
Serious eye damage/irritation	: Not classified pH: 7,6 when rehydrated with indicated volume of H <sub>2</sub> O
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/Injuries After Inhalation	: May be harmful or cause irritation.
Symptoms/Injuries After Skin Contact	: Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	: May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	: Ingestion may cause adverse effects. May be harmful if swallowed.
Chronic Symptoms	: None expected under normal conditions of use.



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### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Sodium chloride (7647-14-5)	
LC50 fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340,7 (340,7 - 469,2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
NOEC chronic fish	252 mg/l (Species: Pimephales promelas)
Sodium azide (26628-22-8)	
LC50 fish 1	0,8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 fish 2	0,7 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 (algae)	0,348 mg/l

#### 12.2. Persistence and degradability

Biotin-SP-conjugated AffiniPure VHH Fragment Alpaca Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Mouse, and Rabbit Serum Proteins)	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Biotin-SP-conjugated AffiniPure VHH Fragment Alpaca Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Mouse, and Rabbit Serum Proteins)	
Bioaccumulative potential	Not established.
Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Other information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container in accordance with local, regional, national, and international regulations.  
Ecology - waste materials : Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

### SECTION 14: Transport information

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
Not regulated for transport				
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

### 14.6. Special precautions for user

No additional information available

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

<b>Sodium phosphate dibasic (7558-79-4)</b>
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
<b>Sodium chloride (7647-14-5)</b>
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
<b>Sodium azide (26628-22-8)</b>
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
<b>Albumins, blood serum (9048-46-8)</b>
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Date of Preparation or Latest Revision : 10/11/2022

# Biotin-SP-conjugated AffiniPure VHH Fragment Alpaca Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Mouse, and Rabbit Serum Proteins)



## Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

- Data sources : Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
- Other information : According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full Text of H- and EUH-statements:

Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
H300	Fatal if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.

**Indication of Changes** No additional information available

## Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists  
ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways  
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road  
ATE - Acute Toxicity Estimate  
BCF - Bioconcentration Factor  
BEI - Biological Exposure Indices (BEI)  
BOD – Biochemical Oxygen Demand  
CAS No. - Chemical Abstracts Service Number  
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008  
COD – Chemical Oxygen Demand  
EC – European Community  
EC50 - Median Effective Concentration  
EEC – European Economic Community  
EINECS – European Inventory of Existing Commercial Chemical Substances  
EmS-No. (Fire) - IMDG Emergency Schedule Fire  
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage  
EU – European Union  
ErC50 - EC50 in Terms of Reduction Growth Rate  
GHS – Globally Harmonized System of Classification and Labeling of Chemicals  
IARC - International Agency for Research on Cancer  
IATA - International Air Transport Association  
IBC Code - International Bulk Chemical Code  
IMDG - International Maritime Dangerous Goods  
IPRV - Ilgalaikio Poveikio Ribinis Dydis  
IOELV – Indicative Occupational Exposure Limit Value  
LC50 - Median Lethal Concentration  
LD50 - Median Lethal Dose

NDS - Najwyższe Dopuszczalne Stezenie  
NDSCh - Najwyższe Dopuszczalne Stezenie Chwilowe  
NDSP - Najwyższe Dopuszczalne Stezenie Pulapowe  
NOAEL - No-Observed Adverse Effect Level  
NOEC - No-Observed Effect Concentration  
NRD - Nevirsytinas Ribinis Dydis  
NTP – National Toxicology Program  
OEL - Occupational Exposure Limits  
PBT - Persistent, Bioaccumulative and Toxic  
PEL - Permissible Exposure Limit  
pH – Potential Hydrogen  
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals  
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail  
SADT - Self Accelerating Decomposition Temperature  
SDS - Safety Data Sheet  
STEL - Short Term Exposure Limit  
STOT - Specific Target Organ Toxicity  
TA-Luft - Technische Anleitung zur Reinhaltung der Luft  
TEL TRK – Technical Guidance Concentrations  
ThOD – Theoretical Oxygen Demand  
TLM - Median Tolerance Limit  
TLV - Threshold Limit Value  
TPRD - Trumpalaikio Poveikio Ribinis Dydis  
TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern  
TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine  
TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte  
TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte

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LOAEL - Lowest Observed Adverse Effect Level	TSCA - Toxic Substances Control Act
LOEC - Lowest-Observed-Effect Concentration	TWA - Time Weighted Average
Log Koc - Soil Organic Carbon-water Partitioning Coefficient	VOC - Volatile Organic Compounds
Log Kow - Octanol/water Partition Coefficient	VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water	VLA-ED - Valor Límite Ambiental Exposición Diaria
MAK - Maximum Workplace Concentration/Maximum Permissible Concentration	VLE - Valeur Limite D'exposition
MARPOL - International Convention for the Prevention of Pollution	VME - Valeur Limite De Moyenne Exposition
	vPvB - Very Persistent and Very Bioaccumulative
	WEL - Workplace Exposure Limit
	WGK - Wassergefährdungsklasse

EU GHS SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*