Date of issue: 25/04/2024 Version: 3.1 SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product Form : Mixture Product Name : Peroxidase-conjugated AffiniPure™ F(ab')₂ Fragment Donkey Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins) Product Code : 709-036-149 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. Uses advised against 1.2.2. No additional information available 1.3. Details of the supplier of the safety data sheet Manufacturer **European Contact** Jackson ImmunoResearch Laboratories, Inc. Jackson ImmunoResearch Europe LTD 872 West Baltimore Pike Cambridge House West Grove, PA 19390 St Thomas' Place T: 800-367-5296. 610-869-4024 Ely, Cambridgeshire CB7 4EX, UK F: 610-869-0171 T: +44 (0) 1638 782616 tech@jacksonimmuno.com F: +44 (0) 1353 664675 www.jacksonimmuno.com 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] Not classified

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label elements

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

2.3. Other hazards

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

classification

SECTION 3: Composition/information on ingredients



Peroxidase-conjugated AffiniPure™ F(ab')₂ Fragment Donkey

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)

Safety Data Sheet

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

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



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

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification According to Regulation (EC) No. 1272/2008 [CLP]
Sodium phosphate dibasic	(CAS-No.) 7558-79-4 (EC-No.) 231-448-7	2.23	Not classified
Peroxidase-conjugated AffiniPure™ F(ab') ₂ Fragment Donkey Anti-Human	(CAS-No.) Not assigned	2.88	Not classified
IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)			
Sodium chloride	(CAS-No.) 7647-14-5 (EC-No.) 231-598-3	23.24	Not classified
Albumins, blood serum	(CAS-No.) 9048-46-8 (EC-No.) 232-936-2	23.88	Not classified

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	: When symptoms occur: go into open air and ventilate suspected area. Obtain
	medical attention if breathing difficulty persists.
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.
_	d effects, both acute and delayed
	: Not expected to present a significant hazard under anticipated conditions of
Symptoms/effects	
	normal use.
Symptoms/effects after inhalation	: Prolonged exposure may cause irritation.
Symptoms/effects after skin contact	: Prolonged exposure may cause skin irritation.
Symptoms/effects after eye contact	: May cause slight irritation to eyes.
Symptoms/effects after ingestion	: Ingestion may cause adverse effects.
Chronic symptoms	: None expected under normal conditions of use.
4.3. Indication of any immediate r	nedical attention and special treatment needed
If exposed or concerned get medical advid	re and attention. If medical advice is needed, have product container or label at hand

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

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



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

Suitable extinguishing media	: Water spray, fog, carbon dioxide (CO ₂), 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	: Product is not flammable.		
Explosion hazard	: Product is not explosive.		
Reactivity	: Hazardous reactions will not occur under normal conditions.		
Hazardous decomposition products in	: Phosphorous oxides. Sodium oxides. Hydrogen chloride gas.		
case of fire			
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 relea	ase measures		
	ctive equipment and emergency procedures		
General measures	: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor,		
	mist, spray).		
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.		
6.3. Methods and material for co			
For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into		
	, , , , , , , , , , , , , , , , , , , ,		

sewers or streams. Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after

6.4. Reference to other sections

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

a spill.

SECTION 7: Handling and storage				
7.1. Precautions for safe handling				
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, inc	cluding any incompatibilities			
Technical measures	: Comply with applicable regulations.			

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



Safety Data Sheet

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Storage conditions

: Keep container closed when not in use. Store at 2-8°C (35°F - 46°F). Keep/Store away from extremely high temperatures and incompatible materials.

Incompatible materials

: Strong acids, strong bases, strong oxidizers.

Specific end use(s) 7.3.

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**

Sodium chloride (7647-14-5)		
Latvia	OEL TWA (mg/m³)	5 mg/m ³
Lithuania IPRV (mg/m³)		5 mg/m ³

8.2. Exposure controls	
Appropriate engineering controls	 Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
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.

9.1. Information on basic physical and chemical properties		
Physical state	:	Solid
Colour	:	Light brown solid
Odour	:	Odourless, as water
Odour threshold	:	No data available
рН	:	7.6, when rehydrated with indicated volume of H_2O
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 temerature	:	No data available

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



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

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 coefficent: 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		

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

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.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition may produce: Phosphorus oxides. Sodium oxides. Hydrogen chloride gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Not classified

Sodium phosphate dibasic (7558-79-4)		
LD50 oral rat	17 g/kg	
LD50 dermal rat	> 5000 mg/kg (50% solution)	
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 ³ (Exposure time: 1 h)	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



Safety Data Sheet

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

STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Symptoms/Injuries After Inhalation	: Prolonged exposure may 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.	
Chronic Symptoms	: None expected under normal conditions of use.	

: Based on available data, the classification criteria are not met.

symptoms

SECTION 12: Ecological information

Potential adverse human health effects and

12.1. Toxicity

Ecology - general

: Not classified.

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)	

12.2. Persistence and degradability

Peroxidase-conjugated AffiniPure™ F(ab')₂ Fragment Donkey Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins) Persistence and degradability Not established.

12.3. **Bioaccumulative potential**

Peroxidase-conjugated AffiniPure™ F(ab')₂ Fragment Donkey Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken,

Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)

Γ	Codium shlavida (7047 44 5)	
L	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

Other adverse effects 12.6.

Other information

: Avoid release to the environment.

SECTION 13: Disposal considerations

Waste treatment methods 13.1.

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



Safety Data Sheet

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

Ecology - waste materials	: Avoid release to the environment.
recommendations	international regulations.
Product/Packaging disposal	: Dispose of contents/container in accordance with local, regional, national, and

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

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN numbe	r			
Not regulated for trai	nsport			
14.2. UN proper	shipping name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport h	azard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing gro	oup			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment : No	environment : No	environment : No	environment : No	environment : No
	Marine pollutant : 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

Sodium phosphate dibasic (7558-79-4)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Sodium chloride (7647-14-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Albumins, blood serum (9048-46-8)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.1.2. National regulations

No additional information available

Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



Safety Data Sheet

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

Chemical safety assessment 15.2.

No chemical safety assessment has been carried out

SECTION 16: Other information				
Date of Preparation or Latest Revision Data sources	 25/04/2024 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			

Indication of Changes No additional information available

Abbreviations and Acronyms

Abbreviations and Actomytis	
ACGIH – American Conference of Governmental Industrial Hygienists	NDS - Najwyzsze Dopuszczalne Stezenie
ADN – European Agreement Concerning the International Carriage of	NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe
Dangerous Goods by Inland Waterways	NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe
ADR - European Agreement Concerning the International Carriage of	NOAEL - No-Observed Adverse Effect Level
Dangerous Goods by Road	NOEC - No-Observed Effect Concentration
ATE - Acute Toxicity Estimate	NRD - Nevirsytinas Ribinis Dydis
BCF - Bioconcentration Factor	NTP – National Toxicology Program
BEI - Biological Exposure Indices (BEI)	OEL - Occupational Exposure Limits
BOD – Biochemical Oxygen Demand	PBT - Persistent, Bioaccumulative and Toxic
CAS No Chemical Abstracts Service Number	PEL - Permissible Exposure Limit
CLP – Classification, Labeling and Packaging Regulation (EC) No	pH – Potential Hydrogen
1272/2008	REACH – Registration, Evaluation, Authorisation, and Restriction of
COD – Chemical Oxygen Demand	Chemicals
EC – European Community	RID – Regulations Concerning the International Carriage of Dangerous
EC50 - Median Effective Concentration	Goods by Rail
EEC – European Economic Community	SADT - Self Accelerating Decomposition Temperature
EINECS – European Inventory of Existing Commercial Chemical	SDS - Safety Data Sheet
Substances	STEL - Short Term Exposure Limit
EmS-No. (Fire) - IMDG Emergency Schedule Fire	STOT - Specific Target Organ Toxicity
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage	TA-Luft - Technische Anleitung zur Reinhaltung der Luft
EU – European Union	TEL TRK – Technical Guidance Concentrations
ErC50 - EC50 in Terms of Reduction Growth Rate	ThOD – Theoretical Oxygen Demand
GHS – Globally Harmonized System of Classification and Labeling of	TLM - Median Tolerance Limit
Chemicals	TLV - Threshold Limit Value
IARC - International Agency for Research on Cancer	TPRD - Trumpalaikio Poveikio Ribinis Dydis
IATA - International Air Transport Association	TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von
IBC Code - International Bulk Chemical Code	Gefahrstoffen in ortsbeweglichen Behältern
IMDG - International Maritime Dangerous Goods	TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine
IPRV - Ilgalaikio Poveikio Ribinis Dydis	TRGS 900 - Technische Regel für Gefahrstoffe 900 –
IOELV – Indicative Occupational Exposure Limit Value	Arbeitsplatzgrenzwerte
LC50 - Median Lethal Concentration	TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische
LD50 - Median Lethal Dose	Grenzwerte
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	VLA-ED - Valor Límite Ambiental Exposición Diaria
substance in a two-phase system consisting of two largely immiscible	VLE – Valeur Limite D'exposition
solvents, in this case octanol and water	VME – Valeur Limite De Moyenne Exposition
MAK – Maximum Workplace Concentration/Maximum Permissible	vPvB - Very Persistent and Very Bioaccumulative

Peroxidase-conjugated AffiniPure[™] F(ab')₂ Fragment Donkey Anti-Human IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Mouse, Rabbit, Rat, and Sheep Serum Proteins)



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Concentration MARPOL - International Convention for the Prevention of Pollution EU GHS SDS WEL–Workplace Exposure Limit WGK-Wassergefährdungsklasse

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.