Fragment Specific

Safety Data Sheet

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



Version: 3.1

Date of issue: 27/04/2024

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

1.1. **Product identifier** Product Form : Mixture Product Name : Peroxidase-conjugated AffiniPure[™] Goat Anti-Rat IgG, F(ab')₂ Fragment Specific Product Code : 112-035-006 Relevant identified uses of the substance or mixture and uses advised against 1.2. 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 **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

3.1. Substances

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification According to Regulation (EC) No.

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			1272/2008 [CLP]	
Sodium phosphate dibasic	(CAS-No.) 7558-79-4	2.23	Not classified	
	(EC-No.) 231-448-7			
Peroxidase-conjugated AffiniPure™	(CAS-No.) Not assigned	2.83	Not classified	
Goat Anti-Rat IgG, F(ab') ₂ Fragment				
Specific				
Sodium chloride	(CAS-No.) 7647-14-5	23.26	Not classified	
	(EC-No.) 231-598-3			
Albumins, blood serum	(CAS-No.) 9048-46-8	23.89	Not classified	
	(EC-No.) 232-936-2			
SECTION 4: First aid measu	ures			
4.1. Description of first aid mea				
First-aid measures general		g 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			
		-	difficulty persists.	
First-aid measures after skin contact				
	minutes. Obtain m	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 persis			
First-aid measures after ingestion			omiting. Obtain medical attention.	
1.2. Most important symptoms		-		
Symptoms/effects		esent a sign	ificant hazard under anticipated conditions of	
	normal use.			
Symptoms/effects after inhalation	: Prolonged exposur			
Symptoms/effects after skin contact Symptoms/effects after eye contact	: Prolonged exposur	-		
Symptoms/effects after ingestion	: May cause slight in : Ingestion may caus		-	
Chronic symptoms	: None expected und			
4.3. Indication of any immedia	•			
		-	is needed, have product container or label at hand	
SECTION 5: Firefighting mode	easures			
5.1. Extinguishing media	· Mator coray for	arbon diay	ide (CO-) alcohol registant foam or dry shemical	
Suitable extinguishing media			ide (CO ₂), alcohol-resistant foam, or dry chemical.	
the solution is the solution of the solution o	Use extinguishing media appropriate for surrounding fire.			
Unsuitable extinguishing media	dia : Do not use a heavy water stream. Use of heavy stream of water may spread fire. ing from the substance or mixture			
5.2. Special hazards arising from	m the substance or mixt	ure		

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.

: Product is not flammable.

case of fire

Fire hazard

- 5.3. Advice for firefighters Precautionary measures fire
- : Exercise caution when fighting any chemical fire.

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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

JLC	non of Accidental Fereda	
6.1.	Personal precautions, protect	ive equipment and emergency procedures
Gene	ral measures	: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).
6.1.1.	For non-emergency personnel	
Prote	ctive equipment	: Use appropriate personal protective equipment (PPE).
Emer	gency procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Prote	ctive equipment	: Equip cleanup crew with proper protection.
Emer	gency 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 con	tainment and cleaning up
For c	ontainment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Meth	ods 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 a spill.
C A	Deference to other costions	

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	
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, in	cluding 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°F). Keep/Store away from extremely high temperatures and incompatible materials.
Incompatible materials	: Strong acids, strong bases, strong oxidizers.
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

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

8.2. Exposure controls

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Appropriate engineering controls

Personal protective equipment

- 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.
 Gloves. Protective clothing. Protective goggles.

Materials for protective clothing Hand protection Eye and Face Protection Skin and body protection Respiratory protection

- : Chemically resistant materials and fabrics.
- : Wear protective gloves.
- : Chemical safety goggles.
- : Wear suitable protective clothing.
- : 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

9.1. Informa	tion on basic physical and	cnemicai	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	ļ	:	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 ten	nperature	:	No data available
Decomposition to	emerature	:	No data available
Flammability (so	lid, gas)	:	No data available
Vapour pressure		:	No data available
Relative vapour o	density at 20 °C	:	No data available
Relative density		:	No data available
Solubility		:	Water
Partition coeffice	ent: n-octanol/water	:	No data available
Viscosity		:	No data available
Explosive proper	ties	:	No data available
Oxidising proper	ties	:	No data available
Explosivelimits		:	No data available
9.2. Other in	formation		

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

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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.

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		
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.

: 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

Chronic Symptoms

: Not classified.

Sodium chloride (7647-14-5)



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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™ Goat Anti-Rat IgG, F(ab') ₂ Fragment Specific		
Persistence and degradability	Not established.	
L2.3. Bioaccumulative potential Peroxidase-conjugated AffiniPure™ Goat Anti-Rat IgG, F(ab') ₂ Fragment Specific		
Bioaccumulative potential Not established.		
Sodium chloride (7647-14-5)		
BCF fish 1	(no bioaccumulation)	
L2.4. 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 : A

: Avoid release to the environment.

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 number				
Not reg	ulated for transp	ort			
14.2.	UN proper sh	ipping name			
Not app	licable	Not applicable	Not applicable	Not applicable	Not applicable
14.3.	Transport haz	ard class(es)			
Not app	licable	Not applicable	Not applicable	Not applicable	Not applicable
14.4.	Packing group)			
Not app	licable	Not applicable	Not applicable	Not applicable	Not applicable
14.5.	Environmenta	al hazards			
Danger	ous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the

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, loool allig to i togalation (
environment : No	environment : No	environment : No	environment : No	environment : No
	Marine pollutant : No			
14.6. Special prec	autions for user			
No additional informa	tion 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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information				
Date of Preparation or Latest Revision	: 27/04/2024			
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			

Indication of Changes No additional information available

Abbreviations and Acronyms

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



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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 LOAEL - Lowest Observed Adverse Effect Level	 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 TV - Threshold Limit Value TPRD - Trumpalaikio Poveikio Ribinis Dydis TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern TRGS 590 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte TSCA - Toxic Substances Control Act
ErC50 - EC50 in Terms of Reduction Growth Rate	ThOD – Theoretical Oxygen Demand
GHS – Globally Harmonized System of Classification and Labeling of	
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
Concentration	
MARPOL - International Convention for the Prevention of Pollution	WEL – Workplace Exposure Limit
WARPOL - International convention for the Prevention of Ponution	

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.