

Safety Data Sheet

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

Date of issue: 19/04/2024 Version: 3.1

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

1.1. Product identifier

Product Form : Mixture

Product Name : Peroxidase-conjugated AffiniPure™ F(ab¹)₂ Fragment Donkey Anti-Rat IgG (H+L)

(minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster,

Horse, Human, Rabbit, and Sheep Serum Proteins)

Product Code : 712-036-150

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 European Contact

Jackson ImmunoResearch Laboratories, Inc. Jackson ImmunoResearch Europe LTD

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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

19/04/2024 EN (English) 1 / 9



Safety Data Sheet

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-Rat IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Human, Rabbit, and Sheep Serum Proteins)	(CAS-No.) Not assigned	2.88	Not classified
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.

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 : Prolonged exposure may cause irritation.

Symptoms/effects after ever 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 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 (CO₂), alcohol-resistant foam, or dry chemical.

Use extinguishing media appropriate for surrounding fire.



Safety Data Sheet

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

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 release <u>measures</u>

6.1. Personal precautions, protective 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 containment and cleaning up

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

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

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°F). Keep/Store

away from extremely high temperatures and incompatible materials.

19/04/2024 EN (English) 3 / 9



Safety Data Sheet

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

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/m³	

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 Eye and Face Protection : Wear protective gloves.: 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 brown solid
Odour : Odourless, as water
Odour threshold : No data available

pH : 7.6, when rehydrated with indicated volume of H₂O

No data available Evaporation rate No data available Melting point Freezing point No data available **Boiling** point No data available Flash point No data available No data available Auto-ignition temperature No data available Decomposition temerature Flammability (solid, gas) No data available Vapour pressure No data available

19/04/2024 EN (English) 4 / 9



Safety Data Sheet

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

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 : No data available

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	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/m³ (Exposure time: 1 h)		

Skin corrosion/irritation: Not classifiedSerious eye damage/irritation: Not classifiedRespiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSTOT-single exposure: Not classified



Safety Data Sheet

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

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.

Potential adverse human health effects and : Based on available data, the classification criteria are not met.

symptoms

SECTION 12: Ecological information

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-Rat IgG (H+L) (minimal cross-reaction to Bovine, Chicken, Goat,			
Guinea Pig, Syrian Hamster, Horse, Human, Rabbit, and Sheep Serum Proteins)			
Persistence and degradability	Not established.		

12.3. Bioaccumulative potential

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

19/04/2024 EN (English) 6 / 9



Safety Data Sheet

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

Product/Packaging disposal : Dispose of contents/container in accordance with local, regional, national, and

recommendations international regulations.

Ecology - waste materials : 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	IATA	ADN	RID
14.1.	UN number	•		•	
Not reg	gulated for transp	ort			
14.2.	2. UN proper shipping name				
Not ap	plicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3.	14.3. Transport hazard class(es)				
Not ap	plicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4.	14.4. Packing group				
Not ap	plicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards					
Danger	ous 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



Safety Data Sheet

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

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Date of Preparation or Latest Revision : 19/04/2024

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 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

LOAEL - Lowest Observed Adverse Effect Level LOEC - Lowest-Observed-Effect Concentration

Log Koc - Soil Organic Carbon-water Partitioning Coefficient

Log Kow - Octanol/water Partition Coefficient

 $\label{logPow-Ratio} \mbox{Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible and the concentration of the con$

solvents, in this case octanol and water

 $MAK-Maximum\ Workplace\ Concentration/Maximum\ Permissible$

NDS - Najwyzsze Dopuszczalne Stezenie

NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe NDSP - Najwyzsze 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

TSCA - Toxic Substances Control Act TWA - Time Weighted Average VOC – Volatile Organic Compounds

VLA-EC - Valor Límite Ambiental Exposición de Corta Duración

VLA-ED - Valor Límite Ambiental Exposición Diaria

VLE – Valeur Limite D'exposition

VME – Valeur Limite De Moyenne Exposition vPvB - Very Persistent and Very Bioaccumulative

19/04/2024 EN (English) 8 / 9



Safety Data Sheet

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

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.