

Serum Proteins)		
Safety Data Sheet		
According to Regulation (EC) No. 1907/20	06 (REACH) with its amend	ment Regulation (EU) 2015/830
	e of issue: 26/04/2024	Version: 3.1
SECTION 1: Identification	of the substance	e/mixture and of the company/undertaking
1.1. Product identifier		
Product Form	: Mixture	
Product Name	: AffiniPure™ F(a	ab') <sub>2</sub> Fragment Mouse Anti-Rat IgG (H+L) (minimal cross-reaction to
	Human, Bovine	e, Horse, Mouse, Goat, and Rabbit Serum Proteins)
Product Code	: 212-006-168	
1.2. Relevant identified uses of t	ne substance or mixture	and uses advised against
1.2.1. Relevant identified uses		
Use of the substance/mixture		earch use only. Not for diagnostic or therapeutic use. This is not a
	medical device	e. Contact supplier for specific applications.
1.2.2. Uses advised against		
No additional information available		
<b>1.3.</b> Details of the supplier of	the safety data sheet	
Manufacturer		European Contact
Jackson ImmunoResearch Laborator	ies, Inc.	Jackson ImmunoResearch Europe LTD
872 West Baltimore Pike		Cambridge House St Thomas' Place
West Grove, PA 19390 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 respor	sible for this SDS:	
tech@jacksonimmuno.com		
1.4. Emergency telephone nu	mber	
Emergency number :	+1-610-869-4024 (USA)	
SECTION 2: Hazards ident	ification	
2.1. Classification of the subst		
Classification According to Regulation		Pl
Not classified		.1
Adverse physicochemical, human heal	th and environmental e	ffects
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



## Safety Data Sheet

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

#### 3.2. Mixture

Name	Product identifier	%	Classification According to Regulation (EC) No. 1272/2008 [CLP]
AffiniPure™ F(ab') <sub>2</sub> Fragment Mouse	(CAS-No.) Not assigned	0.11	Not classified
Anti-Rat IgG (H+L) (minimal cross-reaction to Human, Bovine, Horse, Mouse, Goat, and Rabbit Serum Proteins)			
Sodium phosphate dibasic	(CAS-No.) 7558-79-4 (EC-No.) 231-448-7	0.14	Not classified
Sodium chloride	(CAS-No.) 7647-14-5 (EC-No.) 231-598-3	1.44	Not classified

# 4.1. Description of first aid measures

4.1. Description of first aid measur	es
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	d effects, both acute and delayed
Symptoms/effects	<ul> <li>Not expected to present a significant hazard under anticipated conditions of normal use.</li> </ul>
Symptoms/effects after inhalation	: May be harmful or 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. 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	: Product is not flammable.
Explosion hazard	: Product is not explosive.
Reactivity	: Hazardous reactions will not occur under normal conditions.



## Safety Data Sheet

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

Hazardous decomposition products in case of fire	: Phosphorous oxides. Sodium oxides. Hydrogen chloride gas.
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	se measures
6.1. Personal precautions, protect	tive equipment and emergency procedures
General measures	<ul> <li>Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).</li> </ul>
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 cor	ntainment 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 p	ersonal protection and Section 13 for disposal considerations.

SECTION 7: Handling and	storage
7.1. Precautions for safe hand	ling
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. Avoid breathing vapors, mist, spray.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety procedures.
7.2. Conditions for safe storag	e, including any incompatibilities
Technical measures	: Comply with applicable regulations.
Storage conditions	: Keep container closed when not in use. Store at 2-8°C (35.6°F - 46.4°F) under sterile conditions. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible materials 7.3. Specific end use(s)	: Strong acids, strong bases, strong oxidizers.

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



Safety Data Sheet

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

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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

#### 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.
   Gloves. Protective clothing. Protective goggles.
- Personal protective equipment



- 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 chemic	cal properties
<b>D</b> 1			

Physical state	: Liquid
Colour	: Colorless liquid
Odour	: Odourless, as water
Odour threshold	: No data available
рН	: 7.6
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



#### Safety Data Sheet

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

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

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 <sup>3</sup> (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	



### Safety Data Sheet

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

Symptoms/Injuries After Inhalation
Symptoms/Injuries After Skin Contact
Symptoms/Injuries After Eye Contact
Symptoms/Injuries After Ingestion
Chronic Symptoms

- : Prolonged exposure may cause irritation.
- : Prolonged exposure may cause skin irritation.
- : May cause slight irritation to eyes.
- : Ingestion may cause adverse effects.
- : None expected under normal conditions of use.

Potential adverse human health effects and symptoms

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

# 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

AffiniPure™ F(ab')<sub>2</sub> Fragment Mouse Anti-Rat IgG (H+L) (minimal cross-reaction to Human, Bovine, Horse, Mouse, Goat, and Rabbit Serum Proteins)

Persistence and degradability		Not established.
12.3.	Bioaccumulative potential	

AffiniPure<sup>™</sup> F(ab')<sub>2</sub> Fragment Mouse Anti-Rat IgG (H+L) (minimal cross-reaction to Human, Bovine, Horse, Mouse, Goat, and Rabbit Serum Proteins)

Not established.

# Bioaccumulative potential

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

SECTION 1/1: Transport information		
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



#### Safety Data Sheet

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

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 tra	nsport			
14.2. UN proper	shipping name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport	hazard 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. Environme	ental 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)

#### 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 Data sources	<ul> <li>26/04/2024</li> <li>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.</li> </ul>
	according to GHS or their subsequent adoption of GHS.



Safety Data Sheet

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

Other information

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#### 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 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 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 VME-Valeur Limite De Moyenne Exposition MAK – Maximum Workplace Concentration/Maximum Permissible vPvB - Very Persistent and Very Bioaccumulative WEL-Workplace Exposure Limit Concentration WGK - Wassergefährdungsklasse

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 TIM - 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

MARPOL - International Convention for the Prevention of Pollution 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.