872 W. Baltimore Pike, West Grove, PA 19390
800-367-5296, 610-869-4024, FAX:
610-869-0171
cuserv@jacksonimmuno.com
www.jacksonimmuno.com
www.jireurope.com

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II

SAFETY DATA SHEET

Antisera, delipidated and freeze-dried with preservative

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

1.1 Product identifier

Product name: Antisera, delipidated and freeze-dried with preservative

Product code:

102-001-001	109-001-043	114-001-003	301-001-001	308-001-001	315-001-008	709-001-043
102-001-003	111-001-001	115-001-001	301-001-003	308-001-003	323-001-021	711-001-003
106-001-003	111-001-003	115-001-003	303-001-003	309-001-003	515-001-003	712-001-003
108-001-003	111-001-006	115-001-006	304-001-003	309-001-008	523-001-021	713-001-003
109-001-001	111-001-008	115-001-008	305-001-001	312-001-003	703-001-003	715-001-003
109-001-003	112-001-001	115-001-020	305-001-003	313-001-001	705-001-003	001-030-003
109-001-006	112-001-003	123-001-021	305-001-008	313-001-003	706-001-003	003-030-003
109-001-008	112-001-008	127-001-003	307-001-003	315-001-003	709-001-003	005-030-003

SDS #: 4EU

Product description:

102-001-001	Goat Anti-Cat Whole Serum
102-001-003	Goat Anti-Cat IgG (H+L)
106-001-003	Goat Anti-Guinea Pig IgG (H+L)
108-001-003	Goat Anti-Horse IgG (H+L)
109-001-001	Goat Anti-Human Whole Serum
109-001-003	Goat Anti-Human IgG (H+L)
109-001-006	Goat Anti-Human IgG, F(ab')2 Fragment Specific
109-001-008	Goat Anti-Human IgG, Fc Fragment Specific
109-001-043	Goat Anti-Human IgM, Fc5µ Fragment Specific
111-001-001	Goat Anti-Rabbit Whole Serum
111-001-003	Goat Anti-Rabbit IgG (H+L)
111-001-006	Goat Anti-Rabbit IgG, F(ab')2 Fragment Specific
111-001-008	Goat Anti-Rabbit IgG, Fc Fragment Specific
112-001-001	Goat Anti-Rat Whole Serum
112-001-003	Goat Anti-Rat IgG (H+L)
112-001-008	Goat Anti-Rat IgG, Fc Fragment Specific
114-001-003	Goat Anti-Swine IgG (H+L)
115-001-001	Goat Anti-Mouse Whole Serum
115-001-003	Goat Anti-Mouse IgG (H+L)
115-001-006	Goat Anti-Mouse IgG, F(ab')2 Fragment Specific
115-001-008	Goat Anti-Mouse IgG, Fc Fragment Specific
115-001-020	Goat Anti-Mouse IgM, µ Chain Specific
123-001-021	Goat Anti-Horseradish Peroxidase
127-001-003	Goat Anti-Armenian Hamster IgG (H+L)
301-001-001	Rabbit Anti-Bovine Whole Serum
301-001-003	Rabbit Anti-Bovine IgG (H+L)
303-001-003	Rabbit Anti-Chicken IgY (IgG) (H+L)
304-001-003	Rabbit Anti-Dog IgG (H+L)
305-001-001	Rabbit Anti-Goat Whole Serum
305-001-003	Rabbit Anti-Goat IgG (H+L)
305-001-008	Rabbit Anti-Goat IgG, Fc Fragment Specific
307-001-003	Rabbit Anti-Syrian Hamster IgG (H+L)
308-001-001	Rabbit Anti-Horse Whole Serum
308-001-003	Rabbit Anti-Horse IgG (H+L)
309-001-003	Rabbit Anti-Human IgG (H+L)
309-001-008	Rabbit Anti-Human IgG, Fc Fragment Specific
312-001-003	Rabbit Anti-Rat IgG (H+L)
313-001-001	Rabbit Anti-Sheep Whole Serum
313-001-003	Rabbit Anti-Sheep IgG (H+L)
315-001-003	Rabbit Anti-Mouse IgG (H+L)
315-001-008	Rabbit Anti-Mouse IgG, Fc Fragment Specific
323-001-021	Rabbit Anti-Horseradish Peroxidase
515-001-003	Sheep Anti-Mouse IgG (H+L)
523-001-021	Sheep Anti-Horseradish Peroxidase
703-001-003	Donkey Anti-Chicken IgY (IgG) (H+L)
705-001-003	Donkey Anti-Goat IgG (H+L)
706-001-003	Donkey Anti-Guinea Pig IgG (H+L)
709-001-003	Donkey Anti-Human IgG (H+L)
709-001-043	Donkey Anti-Human IgM, Fc5µ Fragment Specific
711-001-003	Donkey Anti-Rabbit IgG (H+L)
712-001-003	Donkey Anti-Rat IgG (H+L)
713-001-003	Donkey Anti-Sheep IgG (H+L)
715-001-003	Donkey Anti-Mouse IgG (H+L)

Product type: Freeze-dried powder

Other means of identification: None

1.2 Revelant identified uses of the substance or mixtureidentifier

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

1.3 Details of the supplier of the safety data sheet

European Contact
Jackson ImmunoResearch Europe LTD
Unit 7, Acorn Business Centre
Oaks Drive, Newmarket,
Suffolk, CB8 7SY, UK
T: +44 (0) 1638 782616
F: +44 (0) 1638 668462
cuserv@jireurope.com
www.jireurope.com

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

E-mail address of the person responsible for this SDS: tech@jacksonimmuno.com

1.4 Emergency telephone number

Emergency Contact
Telephone number: **CHEMTREC:**
800-424-9300
OUTSIDE USA:
703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Directive 1999/45/E [DPD]
Europe
This product is not classified as dangerous after rehydration according to directive 1999/45/EC and its amendments.

Classification: Not classified.

See Section 16 for the full text of the R phrases or H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard symbol or symbols: N/A

Indication of danger: N/A

Risk phrases: After rehydration, this product is not classified according to EU legislation.

Safety phrases: Not applicable.

Hazardous ingredients: The only danger of this product is associated with sodium azide which is present in a very small amount. After rehydration, sodium azide is below the threshold level of 1% for a toxic chemical.

Supplemental label elements: Not applicable.

Special packaging requirements
Containers to be fitted with child-resistant fastenings: Not applicable.
Tactile warning of danger: Not applicable.

2.3 Other hazards
Other hazards which do not result in classification: Not applicable

SECTION 3: Composition/information on ingredients

Substance/mixture: Mixture

Chemical Name	CAS#	EC #	% (w/w)
Sodium Azide	26628-22-8	247-852-1	0.6-1.6 [0.05%(w/v)after rehydration]
Sodium Phosphate	7558-79-4	231-448-7	1.7-4.0
Sodium Chloride	7647-14-5	231-598-3	17-46
Delipidated Antisera	N/A	N/A	48-80

This mixture is not considered to be hazardous after rehydration for use.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: If this product enter the eyes, flush the eyes with gently running water for at least 15 minutes. If inflammation occurs, get medical attention.

Inhalation: Vapors of these products are likely to be only water vapors, so no adverse health effects are expected if vapors are inhaled. If irritation occurs, get medical attention.

Skin contact: Basic hygiene should prevent any problems. If contact with these products leads to reddening, inflammation, or irritation, flush exposed area with running water and get medical attention.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give small quntities of water to drink. Do not induce vomiting unless directed by medical personel. These products are for *in vitro* research use only, not for household, diagnostic, or therapeutic use. They are not medical devices. If these products are accidentally swallowed, no adverse health effects are expected. However, no special precautions are taken to remove or detect the possible presence of endotoxin or pyrogens. If fever or adverse effects are experienced, get medical attention.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.
Inhalation: No specific data.
Skin Contact: No specific data.
Ingestion: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.

SECTION 5: Fire-fighting measures

5.1

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products: Decomposition products may include oxides of carbon, nitrogen, and phosporus in very small quantities.

5.3 Advice for fire fighters

Special precautions for fire fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-face piece operated in positive pressure mode. Clothing for fire fighters (including helmits, protective boots, and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6. Accidental release measures

6.1 Personal

precautions, protective equipment, and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas.
Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders: If specialised clothing is required to deal with the spillage, take note ofany information in Section 8 on suitable and unsuitable materials. See Section 8 also for additional information on hygiene measures.

6.2 Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

6.3 Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water soluble. Alternatively, or if water insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluenttreatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material, e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via licensed waste disposal contractor.

6.4 Reference to other sections: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidelines. The list of Identified Uses in Section 1 should be consulted for any available use specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures: Put on appropriate protective equipment (see Section 8).
Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities: Store at 2-8 ° C under sterile conditions. Store in original container away from incompatible materials (see Section 10) and food and drink. Keep container tighly sealed until ready to use. Prepare working dilution fresh each day. Remove aliquots for dilution and reseal container under sterile conditions. Do not store in unlabeled container. Use appropriate containment to avoid environmental contamination.

7.3 Specific end uses

Recommendations: Not available.
Industrial sector specific solutions: Not available.

SECTION 8: Exposure controls/personal protection

The information

in this section contains generic advice and guidence. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Europe: No exposure limit value known.

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere, or biological monitoring may be required to determine the effectiveness of the venilation or other control measures and/or the necessity to use repiratory protective equipment. Reference should be made to European Standard EN689 for methods for the assesment of exposure by inhalation to chemical agents and national guildance documents formethods for the determination of hazardous substances.

Derived effect levels

No DELs available

Predicted effect concentrations

No PECs available

8.2 Exposure controls

Appropriate engineering controls: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure below any recommended or statutory limits.

Individual protection measures

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavoratory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure the eyewash station and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts.

Skin protection

Hand protection: Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly-fitted, air-purifying, or air-fed respirator complying with an approvedstandard if a risk assessment indicates this is a necessity. Respirator selection must be on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Color: Colorless, as water
Odor: Odorless, as water
Odor threshold: Not available
pH: 7.6
Melting point/freezing point: Not available
Initial boiling point and boiling range: Not available
Flash point: Not available
Evaporation rate: Not available
Flammability: Not available
Burning time: Not available
Burning rate: Not available
Upper/lower flammability or explosive limits: Not available
Vapor pressure: Not available
Vapor density: Not available
Relative density: Not available
Solubility(ies): Soluble in warm and cold water
Partitition coefficient: n-octanol/water
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available
Explosive properties: Not available
Oxidizing properties: Not available

9.2 Other information

No additional information

SECTION 10: Stability and reactivity

10.1 Reactivity:

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability: The product is stable.

10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid: No specific data.

10.5 Incompatible materials: No specific data.

10.6 Hazardous decomposition products: Under normal conditions of storage and use, hazardous decompsition products will not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Sodium Chloride: Oral Rat, LD50, 3,000 mg/kg
Sodium Phosphate: Oral Rat, LD50, 17g/kg
Sodium Azide: Oral Rat, LD50, 27 mg/kg
Antibody Protein: Not established.

Irritation/Corrosion

Conclusion/Summary: Not available.

Sensitizer

Conclusion/Summary: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Conclusion/Summary: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

Teratogenicity

Conclusion/Summary: Not available.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, and Inhalation.

Potential acute health effects

Inhalation: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.
Skin contact: No known significant effects or critical hazards.
Eye contact: No known significant effects or critical hazards.

Symptoms related to the physical, chemical, and toxicological characteristics

Inhalation: No specific data.
Ingestion: No specific data.
Skin contact: No specific data.
Eye contact: No specific data.

Delayed, immediate, and chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Long term effects

Potential immediate effects: Not available.
Potential delayed effects: Not available.

Potential Chronic Health Effects: Not available.

Conclusion/Summary: Not available.
General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Other information: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary: Not available

12.2 Persistence and degradability

Conclusion/Summary: Not available

12.3 Bioaccumulative potential

Not available

12.4 Mobility in soil

Soil/water partition coefficient: Not available
Mobility: Not available

12.5 Results of PBT and vPvB assessment

PBT: Not applicable
vPvB: Not applicable

12.6 Other adverse effects: No known significant effects or critical hazards.

SECTION 13. Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

Packaging

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	Not available	Not available	Not available	Not available
14.2 UN proper shipping name	Not available	Not available	-	-
14.3 Transport hazard class(es)	Not available	Not available	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No	No	No	No
14.6 Special precaution for user	Not available	Not available	Not available	Not available
Additional information	-	-	-	-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the and the IBC Code: Not available

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and articles: Not applicable

Other EU regulations

Europe inventory: Not determined

Black List Chemicals: Not listed

Priority List Chemicals: Not listed

Integrated pollution prevention and control list (IPPC) - Air: Not listed

IPPC - Water: Not listed

National Regulations

15.2 Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling, and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard Statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS
Not classified

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification

Europe

Full text of abbreviation H statements: Not applicable

Full text of classifications [CLP/GHS]: Not applicable

Full text of abbreviated R phrases: Not applicable

Full text of classifications[DSD/DPD]: Not applicable

Date of printing: 10/10/2010

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Date of previous issue: No previous validation

Version: 1.01

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.