MATERIAL SAFETY DATA SHEET

Section 1 Company and Product Identification

Product Name	**Rat Anti-Mouse IgM-AP (Clone 1B4B1)** **Rat Anti-Mouse IgA-AP (Clone 11-44-2)** **Rat Anti-Mouse Kappa-AP (Clone 187.1)** **Rat Anti-Mouse Lambda-AP (Clone JC5-1)** **Rat Anti-Mouse IgG2b-AP (Clone LO-MG2b-2)** **Rat Anti-Mouse IgG3-AP (Clone LO-MG3-7)**
Part Number	732400, 732417, 732424, 732430, 732442, 732448

Doc. ID *732400-75 AA*
Issued (year/month/day) *2005/04/22*

Product Use	For laboratory use only. See product literature for details.
Series Name	Cell Lab
Manufacturer	Manufactured for Beckman Coulter, Inc. 4300 Harbor Blvd. Fullerton, CA 92835-3100, U.S.A.
Distributor and Emergency Phone No.	☎ Refer to attached list, Document ID: 472050, for local distributor and emergency phone numbers.

Section 2 Composition and Information on Ingredients

Hazardous Ingredients:			**Meets Hazardous Criteria:**		
Chemical Name	**CAS #**	**% by wt.**	**EU**	**US OSHA**	**WHMIS**
Glycerol	56-81-5	<60%	No	Yes	Yes

See Section 15 Regulatory Information for additional information on hazard classifications.

Section 3 Hazards Identification

Emergency Overview

Colorless to light brown; Clear; Liquid; Odorless
Nonflammable aqueous solution.
Skin, eye and respiratory tract irritant.
Contains material of animal origin.

Physical Hazards	Sodium azide forms explosive compounds with heavy metals. This product contains concentrations of azide <0.1% (w/w) which with repeated contact with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.
Potential Health Effects Summary	May cause skin, eye and respiratory tract irritation. Reproductive effects have been reported in several animal studies. See Section 11 Toxicological Information for more detailed health information.

Product Hazard Classifications	**EU:**	**WHMIS:**	**US OSHA:**
	Not applicable	D2B	Hazardous

Section 3 Hazards Identification (Continued)

Beckman Coulter Safety Rating	**Flammability (Section V):** 0 **Health (Section XI):** 2 **Reactivity with Water (Section X):** 0 **Contact (Section VIII):** 2	Code 0=none 1=slight 2=caution 3=severe

Section 4 First Aid Measures

Inhalation	If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.
Eye Contact	If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.
Skin Contact	In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If pain or irritation occur, obtain medical attention.
Ingestion	If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

Section 5 Fire Fighting Measures

Flash Point	Not applicable
Flammable Limits	Not applicable
Autoignition Temp.	Not applicable
Extinguishing Media	Use extinguishing media suitable for surrounding fire.
Special Fire and Explosion Hazards	No special hazards determined.
Hazardous Combustion Products	Combustion products posing significant hazards are not expected from the small volume of this product present during normal use.
Protective Equipment for Firefighters	Self-contained breathing apparatus is recommended for firefighters.

Section 6 Accidental Release Measures

Personal Precautions	This product contains a material of biological origin. Use universal precautions during clean up procedures.
Spill and Leak Procedures	As a precautionary measure, treat spilled material with a 1:10 bleach/water solution. Absorb liquid and place in container suitable for disposal. Avoid generation of aerosols during clean up. Comply with applicable waste disposal regulations.
Environmental Precautions	Contain spill to prevent migration.

Section 7 Handling and Storage

Handling Precautions	This product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.
Recommended Storage Conditions	Keep away from incompatible material. To maintain efficacy, store according to the instructions in the product labeling.

Section 8 Exposure Controls and Personal Protection

Exposure Limits	
US OSHA:	
Glycerol	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
ACGIH:	
Glycerol	10 mg/m3 TWA
DFG MAK:	None established
Engineering Controls	No special engineering controls are required. Use with good general ventilation.
Respiratory Protection	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.
Eye Protection	Safety glasses or chemical goggles should be worn to prevent eye contact.
Skin Protection	Impervious gloves, such as latex or equivalent, should be worn to prevent skin contact.

Section 9 Physical and Chemical Properties

Physical State	Liquid
Color	Colorless to light brown
Transparency	Clear
Odor	Odorless
Odor Threshold	Not applicable
pH	≈ 8
Boiling Point	Not available
Melting Point	Not available
Specific Gravity	≈ 1.1 @20°C
Vapor Pressure	Not available
Vapor Density	Not available
Evaporation Rate	Not available
Solubility	
Water	Miscible
Organic	Not available

Section 10 Stability and Reactivity

Stability	Stable under normal temperatures and pressures.

Section 10 Stability and Reactivity (Continued)

Hazardous Incompatibilities	Strong acids Strong bases Strong oxidizers Nitric Acid Metals and metallic compounds Sodium azide forms explosive compounds with heavy metals. This product contains concentrations of azide <0.1% (w/w) which with repeated contact with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.
Hazardous Decomposition Products	Decomposition products posing significant hazards are not expected from the small volume of this product present during normal use.
Conditions to Avoid	Keep away from incompatible material.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients Glycerol	Inhalation LC50 Rat: >570 mg/m3/1H; Oral LD50 Rat: 12600 mg/kg; Oral LD50 Mouse: 4090 mg/kg; Dermal LD50 Rabbit: >10 g/kg
Primary Routes of Exposure	Common routes of entry include inhalation, ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.
Potential Effects of Acute Exposure	Exposure to glycerol by inhalation of mists may cause respiratory tract irritation; skin or eye contact may cause irritation. Mildly toxic by ingestion. Symptoms may include headache, nausea and vomiting. Very high doses may cause kidney damage. This product contains material of animal origin and should be considered as potentially capable of transmitting infectious diseases.
Potential Effects of Chronic Exposure	Repeated or prolonged exposure to glycerol by skin contact may cause dermatitis with irritation and swelling.
Symptoms of Overexposure	Symptoms may include: coughing, headache, fatigue, nausea, vomiting, dizziness, blurred vision, red and watery eyes, abdominal pain and unconsciousness.
Carcinogenicity	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.
Other Effects	Reproductive effects have been reported in animal studies. Possible mutagen.
Conditions Aggravated by Exposure	Individuals with existing skin conditions may find these conditions aggravated by exposure to this product.

Section 12 Ecological Information

Ecotoxicity	Toxic to fish and other water organisms.
Biodegradability	No information available.
Mobility	No information available.

Section 13 Disposal Considerations

Waste Disposal	Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information. Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).

Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

Section 15 Regulatory Information

US Federal and State Regulations

SARA 313	Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA.
CERCLA RG's, 40 CFR 302.4	Sodium Azide is listed.
California Proposition 65	No ingredients listed
Massachusetts MSL	Glycerol is listed. Sodium Azide is listed. Magnesium Chloride, Hexahydrate is listed.
New Jersey Dept. of Health RTK List	Sodium Azide is listed. Magnesium Chloride, Hexahydrate is listed.
Pennsylvania RTK	Glycerol is listed. Sodium Azide is listed. Magnesium Chloride, Hexahydrate is listed.

EU Labeling Classification

Preparation not classified.

Canada

WHMIS Classification:	D2B—Poisonous and Infectious Material: Division 2—Other Toxic Effects: Toxic (Non-reproductive cells mutagenicity)
PIN:	Not applicable
Ingredients on Ingredient Disclosure List:	Sodium Azide
Ingredients with unknown toxicological properties:	None

Section 16 Other Information

For further information, please contact your local Beckman Coulter representative.