



MATERIAL SAFETY DATA SHEET

Section 1 Company and Product Identification

Product Name	Rat Anti-Mouse BP-1/Ly-51-BIOT (Clone FG35.4) Rat Anti-Mouse BiP-BIOT (Clone 76-E6) Hamster Anti-Mouse TCRgd-BIOT (Clone UC7-13D5) Hamster Anti-Mouse CD152/CTLA-4-BIOT (Clone 1B8) Mouse Anti-Mouse CD45.1/Ly5.1-BIOT (Clone A20) Hamster Anti-Mouse LY49C/F/H/I-BIOT (Clone 14B11) Mouse Anti-Mouse LY49I-BIOT (Clone YLI-90) Mouse Anti-Mouse LY49F-BIOT (Clone HBF-719) Rat Anti-Mouse NKG2-A/C/E-BIOT (Clone 20d5) Rat Anti-Mouse CD49b/Pan NK-BIOT (Clone DX5)	Doc. ID 732237-75 AA Issued (year/month/day) 2005/05/05
Part Number	732237, 732240, 732243, 732255, 732262, 732270, 732274, 732278, 732282, 732291	
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.	<u>EU</u>	<u>US OSHA</u>	<u>WHMIS</u>
Sodium Azide	26628-22-8	<0.2%	T+;R28 R32 N ;R 50/53	No	No
See Section 15 Regulatory Information for additional information on hazard classifications.					

Section 3 Hazards Identification

Emergency Overview	Colorless; Clear; Liquid; Odorless Nonflammable aqueous solution. Harmful if swallowed. Contains material of animal origin.
Physical Hazards	Sodium azide forms explosive compounds with heavy metals. Repeated contact of low concentrations of azide with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.

Section 3 Hazards Identification (Continued)

Potential Health Effects Summary	This product contains material of animal origin and should be considered as potentially capable of transmitting infectious diseases. See Section 11 Toxicological Information for more detailed health information.		
Product Hazard Classifications	EU: Xn;R22	WHMIS: Not applicable	US OSHA: Not applicable
Beckman Coulter Safety Rating	Flammability (Section V): 0 Health (Section XI): 1 Reactivity with Water (Section X): 0 Contact (Section VIII): 1	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	None identified.
Hazardous Combustion Products	No combustion products posing significant hazards are expected from this product (a dilute aqueous solution).
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:	None established
ACGIH:	
Sodium Azide	0.29 mg/m ³ Ceiling (as sodium azide); 0.11 ppm Ceiling (as Hydrazoic acid, vapor)
DFG MAK:	
Sodium Azide	0.2 mg/m ³ MAK (inhalable fraction); 0.4 mg/m ³ Peak (inhalable fraction)
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.
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
Transparency	Clear
Odor	Odorless
Odor Threshold	Not applicable
pH	≈ 7.4
Boiling Point	Not available
Melting Point	Not available
Specific Gravity	≈ 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 in closed containers under normal temperatures and pressures.
Hazardous Incompatibilities	Strong acids Strong bases Strong oxidizers Metals and metallic compounds Sodium azide forms explosive compounds with heavy metals. Repeated contact of low concentrations of azide with lead and copper commonly found in plumbing drains may result in the build up of shock sensitive compounds.
Hazardous Decomposition Products	No decomposition products posing significant hazards would be expected from this product (a dilute aqueous solution).
Conditions to Avoid	Avoid contact with incompatible materials.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients Sodium Azide	Oral LD50 Rat: 27 mg/kg; Oral LD50 Mouse: 27 mg/kg; Dermal LD50 Rabbit: 20 mg/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	This product contains material of animal origin and should be considered as potentially capable of transmitting infectious diseases. Although its concentration in this product is low, sodium azide is highly toxic by ingestion and skin absorption. Overexposure may result in irritation of skin, eyes and mucous membranes, lowered blood pressure and irregular heartbeat. Sodium azide is a chemical asphyxiant and may effect the cardiovascular, respiratory and central nervous systems. Symptoms may include irritation, severe, pounding headaches, dizziness, weakness, nausea, vomiting, low blood pressure, rapid heartbeat, convulsions, collapse and death.
Potential Effects of Chronic Exposure	Prolonged or repeated exposure to sodium azide may result in pounding headaches, eye and nose irritation, low blood pressure, fatigue and dizziness.
Symptoms of Overexposure	Symptoms of overexposure may include: eye, skin, nose and throat irritation; headache, weakness, dizziness, confusion, nausea and vomiting. Severe cases may exhibit difficulty in breathing, irregular heartbeat, reddish colored skin, unconsciousness, convulsions, coma and death. Symptoms may be delayed for several hours after exposure.
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.
Conditions Aggravated by Exposure	None identified.

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 Phosphate, Dibasic is listed. Sodium Azide is listed.
California Proposition 65	No ingredients listed
Massachusetts MSL	Sodium Phosphate, Dibasic is listed. Sodium Azide is listed.
New Jersey Dept. of Health RTK List	Sodium Phosphate, Dibasic is listed. Sodium Azide is listed.
Pennsylvania RTK	Sodium Phosphate, Dibasic is listed. Sodium Azide is listed.

EU Labeling Classification

Classification

Xn



Harmful

Risk and Safety Phrases

R22 Harmful if swallowed.

S28 After contact with skin, wash immediately with plenty of water.

Canada

This product does not meet WHMIS criteria for hazardous materials.

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.

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