



Kit MSDS

Doc. ID: 33530-75: Rev. AB

Product Information

Product Name	PROLACTIN	Doc. ID 33530-75 AB Issued (year/month/day) Revised (year/month/day) 2003/05/27
Part Number	33530	
Series Name:	ACCESS®	

Components

Description

PROLACTIN (Compartment R1a)
 PROLACTIN (Compartment R1b)


Transport Information

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



MATERIAL SAFETY DATA SHEET

Section 1 Company and Product Identification

Product Name	PROLACTIN (Compartment R1a)	<i>PROLACTIN</i> Doc. ID 33530-75 AB Issued (year/month/day) Revised (year/month/day) 2003/05/27
Part Number	Component of P/N 33530	
Series Name	ACCESS®	
Manufacturer	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>
Tris(hydroxymethyl)aminomethane	77-86-1	<5.0	No	Yes	Exempt
See Section 15 Regulatory Information for additional information on hazard classifications.					

Section 3 Hazards Identification

Emergency Overview	<p style="text-align: center;">Reddish-brown; Opaque; Liquid; Odorless Nonflammable aqueous solution.</p> <p style="text-align: center;">Contains animal material which may have come in contact with human material. Skin, eye and respiratory tract irritant.</p>		
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	Exposure may result in irritation of skin, eyes, and mucous membranes. See Section 11 Toxicological Information for more detailed health information.		
Product Hazard Classifications	EU: Not applicable	WHMIS: Exempt	US OSHA: Hazardous
Beckman Coulter Safety Rating	Flammability (Section V): 0 Health (Section XI): 1 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. 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	Due to the composition and volume of this product, combustion products generated from it are not expected to present a significant hazard.
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:	None established

Section 8 Exposure Controls and Personal Protection (Continued)

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	Reddish-brown
Transparency	Opaque
Odor	Odorless
Odor Threshold	Not applicable
pH	8.05
Boiling Point	Not available
Melting Point	Not available
Specific Gravity	1.007 @20°C
Vapor Pressure	Not available
Vapor Density	Not available
Evaporation Rate	Not available
Solubility	
Water	Matrix is miscible
Organic	Not available

Section 10 Stability and Reactivity

Stability	Stable under normal temperatures and pressures.
Hazardous Incompatibilities	Metals and metallic compounds Strong oxidizers Strong acids 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	When stored as labeled, no known hazardous decomposition products are formed during the shelf-life of this product.
Conditions to Avoid	Keep away from incompatible material.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients Tris(hydroxymethyl)-aminomethane	Oral LD50 Rat: 5900 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	Exposure to TRIS may result in irritation of skin, eyes and mucous membrane. Eye contact may result in redness, pain and corneal injury. Inhalation may result in chest pain and tightness, coughing, and difficult breathing. Ingestion may cause gastrointestinal irritation with burns to mouth and stomach, and large doses may cause weakness, collapse and death in laboratory animals. This product contains materials of animal origin, some of which may have come into contact with human material during processing. The product should be considered as potentially capable of transmitting infectious diseases.
Potential Effects of Chronic Exposure	Prolonged or repeated exposure to TRIS by skin contact may result in dermatitis. Eye contact may cause conjunctivitis.
Symptoms of Overexposure	Symptoms of overexposure may include: throat irritation and coughing; dry, red, cracked skin; red irritated eyes; headache, drowsiness, dizziness, stupor; convulsions and coma.
Carcinogenicity	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.
Other Effects	None identified.
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).
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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 CERCLA RG's, 40 CFR 302.4	Sodium Azide is subject to reporting requirements of Section 313, Title III of SARA. Zinc Chloride is subject to reporting requirements of Section 313, Title III of SARA. Sodium Phosphate, Dibasic is listed. Zinc Chloride is listed. Sodium Azide is listed.
California Proposition 65	Gentamicin Sulfate has been identified by the State of California to cause reproductive harm. The State of California has adopted a regulation which requires a warning be given to individuals who may be exposed to chemicals identified by the State to cause cancer or reproductive harm. Accordingly, Beckman Coulter advises you of the following warning: WARNING: This product contains a chemical known to the State of California to cause reproductive harm.
Massachusetts MSL	Sodium Phosphate, Dibasic is listed. Zinc Chloride is listed. Sodium Azide is listed. Magnesium Chloride is listed.
New Jersey Dept. of Health RTK List	Sodium Phosphate, Dibasic is listed. Zinc Chloride is listed. Sodium Azide is listed. Magnesium Chloride is listed.
Pennsylvania RTK	Sodium Phosphate, Dibasic is listed. Zinc Chloride is listed. Sodium Azide is listed. Magnesium Chloride is listed.

EU Labeling Classification

Preparation not classified.

Canada

This product is exempt from WHMIS label and MSDS requirements.

PIN:	Not applicable
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Ingredients on Ingredient Disclosure List:	Zinc Chloride Sodium Azide
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Ingredients with unknown toxicological properties:	Product is exempt
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Section 16 Other Information

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


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MATERIAL SAFETY DATA SHEET

Section 1 Company and Product Identification

Product Name	PROLACTIN (Compartment R1b)	<i>PROLACTIN</i> Doc. ID 33530-75 AB Issued (year/month/day) Revised (year/month/day) 2003/05/27
Part Number	Component of P/N 33530	
Series Name	ACCESS®	
Manufacturer	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>
Tris(hydroxymethyl)aminomethane	77-86-1	<2.0	No	Yes	Exempt
Sodium Azide	26628-22-8	<0.3	T+;R28 R32	No	Exempt

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

Section 3 Hazards Identification

Emergency Overview	<p style="text-align: center;"> Colorless; Clear; Liquid; Odorless Nonflammable aqueous solution. Skin, eye and respiratory tract irritant. Harmful if swallowed. </p> <p>Contains animal material which may have come in contact with human material.</p>		
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 eye, skin and respiratory tract irritation and central nervous system depression with headache, dizziness, nausea and unconsciousness. See Section 11 Toxicological Information for more detailed health information.		
Product Hazard Classifications	EU: Xn;R22	WHMIS: Exempt	US OSHA: 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
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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. 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	Combustion products may contain minute amounts of mercury.
Hazardous Combustion Products	Due to the composition and volume of this product, combustion products generated from it are not expected to present a significant hazard.
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. Use good laboratory procedures; avoid eye and skin contact.
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. Use good laboratory procedures; avoid eye and skin contact.
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/m3 Ceiling (as sodium azide); 0.11 ppm Ceiling (as hydrazoic acid vapor)
DFG MAK:	
Sodium Azide	0.2 mg/m3 MAK (inhalable fraction); 0.4 mg/m3 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. 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
Transparency	Clear
Odor	Odorless
Odor Threshold	Not applicable
pH	8.05
Boiling Point	Not available
Melting Point	Not available
Specific Gravity	1.007 @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.
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Section 10 Stability and Reactivity (Continued)

Hazardous Incompatibilities	Metals and metallic compounds Strong oxidizers Strong acids 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	When stored as labeled, no known hazardous decomposition products are formed during the shelf-life of this product.
Conditions to Avoid	Keep away from incompatible material.

Section 11 Toxicological Information

Toxicity Data for Hazardous Ingredients Tris(hydroxymethyl)-aminomethane Sodium Azide	Oral LD50 Rat: 5900 mg/kg 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	Exposure to TRIS may result in irritation of skin, eyes and mucous membrane. Eye contact may result in redness, pain and corneal injury. Inhalation may result in chest pain and tightness, coughing, and difficult breathing. Ingestion may cause gastrointestinal irritation with burns to mouth and stomach, and large doses may cause weakness, collapse and death in laboratory animals. 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. This product contains materials of animal origin, some of which may have come into contact with human material during processing. The product should be considered as potentially capable of transmitting infectious diseases.
Potential Effects of Chronic Exposure	Prolonged or repeated exposure to TRIS by skin contact may result in dermatitis. Eye contact may cause conjunctivitis. 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	Inhalation, skin absorption or ingestion may result in nausea, vomiting, headache, weakness, stupor, decreased blood pressure, lack of coordination, difficulty in breathing and loss of consciousness. Inhalation may also cause a burning sensation, shortness of breath, laryngitis, coughing and chest pain. Skin contact may result in irritation, burning or inflammation; eye contact may cause irritation, stinging, redness and severe watering of the eyes.
Carcinogenicity	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 67/548/EEC Annex I.
Other Effects	None identified.

Section 11 Toxicological Information (Continued)

Conditions Aggravated by Exposure	None identified.
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Section 12 Ecological Information

Ecotoxicity	Toxic to fish and other water organisms.
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Biodegradability	No information available.
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Mobility	No information available.
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Section 13 Disposal Considerations

Waste Disposal	<p>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.</p> <p>Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).</p> <p>This product contains a low level (<0.05%) of Thimerosal. Specific federal, state, and local regulations for disposal of mercury compounds may apply.</p>
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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. Thimerosal is subject to reporting requirements of Section 313, Title III of SARA. Zinc Chloride is subject to reporting requirements of Section 313, Title III of SARA.
CERCLA RG's, 40 CFR 302.4	Zinc Chloride is listed. Sodium Azide is listed. Thimerosal is listed.
California Proposition 65	Thimerosal has been identified by the State of California to cause reproductive harm. The State of California has adopted a regulation which requires a warning be given to individuals who may be exposed to chemicals identified by the State to cause cancer or reproductive harm. Accordingly, Beckman Coulter advises you of the following warning: WARNING: This product contains a chemical known to the State of California to cause reproductive harm.
Massachusetts MSL	Zinc Chloride is listed. Sodium Azide is listed. Magnesium Chloride is listed. Magnesium Chloride, Hexahydrate is listed.
New Jersey Dept. of Health RTK List	Zinc Chloride is listed. Sodium Azide is listed. Magnesium Chloride is listed. Magnesium Chloride, Hexahydrate is listed.

Section 15 Regulatory Information (Continued)

US Federal and State Regulations

Pennsylvania RTK	Zinc Chloride is listed. Sodium Azide is listed. Thimerosal is listed. Magnesium Chloride is listed. Magnesium Chloride, Hexahydrate is listed.
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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 is exempt from WHMIS label and MSDS requirements.

PIN: Not applicable

Ingredients on Ingredient Disclosure List:	Thimerosal Zinc Chloride Sodium Azide
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Ingredients with unknown toxicological properties:	Product is exempt
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Section 16 Other Information

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

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