

Corporate Headquarters

Genzyme Corporation 500 Kendall Street Cambridge, MA 02142 USA

Manufacturer/Distributor

Genzyme Diagnostics 6659 Top Gun Street San Diego, CA 92121 USA

Phone: 617-252-7500

Phone: 858-452-3198

Distributor Genzyme Diagnostics 50 Gibson Drive Kings Hill, West Malling Kent ME19 4AF UK

Phone: +44 (0) 1732 220022

MATERIAL SAFETY DATA SHEETS

Catalog Number:	Kit Name:
145, 145E	OSOM [®] Mono Test

Item Number:	Component Name:
2081	OSOM [®] Mono Test Diluent
2082	OSOM [®] Mono Test Positive Control
2083	OSOM [®] Mono Test Negative Control

Note: The page numbers on the 3 individual MSDSs for this kit are specific to each document. There are a total of 22 pages including this cover sheet.

OSOM[®] Mono Test Stick is an "article" and does not require an MSDS.



OSOM® Mono Test Diluent

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Mono Test Diluent

Synonym(s): Mono DILUENT

Product Use: Component of OSOM® Mono Test kit (Catalog # 145 & 145E). For use in the qualitative detection of infectious mononucleosis heterophile antibodies in serum, plasma or whole blood as an aid in the diagnosis of infectious mononucleosis. For In Vitro Diagnostic Use Only.

Description: Aqueous solution containing salts and preservative.

Corporate Headquarters Genzyme Corporation 500 Kendall Street Cambridge, MA 02142 USA Phone: +1 617-252-7500	Manufacturer/Distributor Genzyme Diagnostics 6659 Top Gun Street San Diego, CA 92121 USA Phone: +1 858-452-3198	Emergency Telephone Numbers Genzyme (U.S.): +1 617-562-4555 CHEMTREC (U.S.): 1-800-424-9300 CHEMTREC (Outside U.S.): +1 703-527-3887
	Distributor Genzyme Diagnostics 50 Gibson Drive Kings Hill, West Malling Kent, ME19 4AF UK Phone: +44 (0) 1732 220022	

2. HAZARDS IDENTIFICATION

Precautionary Statements:

CAUTION! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Harmful by ingestion. Preparation appearance: clear, colorless liquid.

Routes of Exposure:

Occupational exposure routes may include eye contact, skin contact and skin absorption.

Potential Health Effects:

Inhalation	Aerosol inhalation may cause coughing and sore throat.
Eye	Eye exposure may cause irritation, redness and watering.
Skin	Skin contact may cause irritation, dryness and redness. Sodium azide may be absorbed through the skin and result in systemic effects.
Ingestion	Ingestion may cause nausea, diarrhea, vomiting, headache, slight lowering of blood pressure, abdominal pain, and a general feeling of apprehension and unwellness.
Chronic Effects	No data available.
Target Organs	Sodium azide: Cardiovascular and central nervous system.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Diluent

Regulatory Status:

This preparation is classified as hazardous under U.S. OSHA 29 CFR 1910.1200; E.C. Directive 1999/45/EC; Canadian R.S. 1985, c. H-3; U.K. CHIPS 2002 No. 1689; and/or U.N. GHS ST/SG/AC 10/30.

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Potential Environmental Effects:

Unknown.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS #	EC #	% (wt/wt)
Water	7732-18-5	231-791-2	97 - 98
EC R-Phrases: None	EC Hazard Class: None	е	
Inorganic (buffering) salts	Mixture	Mixture	1 - 2
EC R-Phrases: None	EC Hazard Class: None	е	
Sodium azide	26628-22-8	247-852-1	0.2
EC R-Phrases: R28, R32, R50, R53	EC Hazard Class: T+, N	N	

4. FIRST AID MEASURES

Inhalation:

If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:

Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain medical attention if needed or if symptoms, such as redness or irritation persist.

Skin Contact:

In case of contact, flush skin with copious amounts of cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:

In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:

Dilute aqueous solution not considered a fire hazard.

Suitable Extinguishing Media:

Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:

Unknown.

Specific Hazards Arising from the Chemical:

When heated to decomposition, may produce hydrazoic acid fumes.



OSOM® Mono Test Diluent

Standard Protective Equipment and Precautions for Firefighters:

Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Wash hands thoroughly after handling.

Environmental Precautions:

This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. Follow proper disposal procedures.

Methods and Materials for Containment and Clean-Up:

Absorb spill with inert material/sorbent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. HANDLING AND STORAGE

Handling:

Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage:

Store at 15 to 30°C (59 to 86°F). Keep container tightly closed. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Canada - Quebec - Occupational Expos	ure Limits - Cei	lings
Sodium azide		0.11 ppm Ceiling; 0.3 mg/m3 Ceiling
EU - Occupational Exposure Directive (2	2000/39/EC) Ind	icative Occupational Exposure Limit Values (IOELV) - Skin Notations
Sodium azide	26628-22-8	possibility of significant uptake through the skin
EU - Occupational Exposure Directive (2	2000/39/EC) Ind	icative Occupational Exposure Limit Values (IOELV) - STELs
Sodium azide	26628-22-8	0.3 mg/m3 STEL
EU - Occupational Exposure Directive (2	2000/39/EC) Ind	icative Occupational Exposure Limit Values (IOELV) - TWAs
Sodium azide	26628-22-8	0.1 mg/m3 TWA
Germany - DFG - Recommended Expose	ure Limits - Cei	lings (Peak Limitations)
Sodium azide	26628-22-8	0.4 mg/m3 Peak (inhalable fraction)
Germany - DFG - Recommended Expose	ure Limits - MA	K Values
Sodium azide	26628-22-8	0.2 mg/m3 MAK (inhalable fraction)
Germany - TRGS 900 - Occupational Ex	posure Limits -	TWAs
Sodium azide	26628-22-8	0.2 mg/m3 TWA
Israel - Occupational Exposure Limits -	Ceilings	
Sodium azide	26628-22-8	0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (as Hydrazoic acid, vapor)
Korea - Occupational Exposure Limits -	Ceilings	
Sodium azide	26628-22-8	0.1 ppm Ceiling; 0.3 mg/m3 Ceiling

Engineering Controls:

This preparation is aqueous and non-volatile and is not expected to require special ventilation measures. Facilities storing or utilizing this preparation should be equipped with an eyewash fountain.

Personal Protective Equipment (PPE):

Respiratory A respirator is not required under normal conditions of use.

Eye/Face Wear appropriate protective chemical safety glasses.



OSOM® Mono Test Diluent

Personal Protective Equipment (PPE):

Skin	Wear lab coat or other protective garments. Remove contaminated clothing promptly.
	wear lab boar of other protocitio gamente. Remove benaminated eleting prempty.

Gloves Wear chemical resistant protective gloves.

General Follow company-specific safety procedures.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless liquid	pH:	7.0 (approximate)
Odor:	Not available	Solubility:	Water-soluble
Boiling Point:	Not available	Vapor Pressure:	Not available
Melting Point:	Not applicable	Partition Coefficient	Not available
Freezing Point:	Not available	(n-octanol/water):	
-		Vapor Density:	Not available
Flammability/Explo	sivity Limits in Air, Lower:	Not available	
Flammability/Explo	sivity Limits in Air, Upper:	Not available	
Auto-Ignition Temp	erature: Not available		
Flash Point:	Not available		

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

Conditions to Avoid:

Avoid prolonged exposure to direct sunlight.

Incompatible Materials:

Avoid strong oxidizing agents, acids, heavy metals and their salts.

Hazardous Decomposition Products:

None expected under normal conditions of use.

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects:

Toxicology Data - Selected LD50s and LC50s Sodium azide

26628-22-8

22-8 Oral LD50 Rat: 27 mg/kg; Dermal LD50 Rabbit: 20 mg/kg

Local Effects:

No data available.

Chronic Effects:

No data available.



OSOM® Mono Test Diluent

Carcinogenicity:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

ACGIH - Threshold Limits Values - Carcinogens

26628-22-8

Mutagenicity:

Sodium azide

No data available.

Teratogenicity:

No data available.

Reproductive Effects:

No data available.

Sensitization:

No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity - Freshwater Fish Species Data Sodium azide

26628-22-8

96 Hr LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.7 mg/L; 96 Hr LC50 Pimephales promelas: 5.46 mg/L [flow-through]

A4 - Not Classifiable as a Human Carcinogen (as sodium

azide and hydrazoic acid vapor)

Persistance and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Environmental Media:

No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:

This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. If preparation enters drain, flush with a large volume of water to prevent azide build-up. Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:

California - 22 CCR - Presumed Hazardous WastesSodium azide26628-22-8Ignitable; ReactiveRCRA (Resource Conservation & Recovery Act)- P Series Wastes - Acutely Toxic WastesSodium azide26628-22-8waste number P105

14. TRANSPORT INFORMATION

Basic Shipping Description:

Not classified as dangerous goods. Not regulated per IATA and DOT regulations.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Diluent

15. REGULATORY INFORMATION

US Federal Regulations:

This preparation is a component of an FDA-regulated in vitro diagnostic device.

CERCLA/SARA - Hazardous Substances and the		
Sodium azide	26628-22-8	1000 lb final RQ; 454 kg final RQ
CERCLA/SARA - Section 302 Extremely Hazard		
Sodium azide	26628-22-8	1000 lb EPCRA RQ
CERCLA/SARA - Section 302 Extremely Hazard		
Sodium azide	26628-22-8	500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)
CERCLA/SARA - Section 313 - Emission Report	ing	
Sodium azide	26628-22-8	1.0 % de minimis concentration
Inventory - United States - Section 8(b) Inventor	v (TSCA)	
Sodium azide	26628-22-8	Present
US State Regulations:		
California - 8 CCR Section 339 - Director's List o	of Hazardous S	ubstances
Sodium azide	26628-22-8	Present
International Regulations:		
If approved for European Communities use, this pro (98/79/EC).	oduct is regulate	d under the In Vitro Diagnostic Medical Devices Directive
Canada - WHMIS - Classifications of Substance	6	
Sodium azide	26628-22-8	D1A
Canada - WHMIS - Ingredient Disclosure List	20020-22-0	
Sodium azide	26628-22-8	1 %
EU - Dangerous Substances Directive (67/548/E		
-	26628-22-8	
Sodium azide		T+;R28 R32 N;R50-53
EU - Dangerous Substances Directive (67/548/E	•	•
Sodium azide	26628-22-8	S:1/2-28-45-60-61
Germany - Water Classification (VwVwS) - Anne		
Sodium azide	26628-22-8	ID Number 636, hazard class 2 - hazard to waters
Inventory - Australia - Inventory of Chemical Su	-	
Sodium azide	26628-22-8	Present
Inventory - Canada - Domestic Substances List	• •	
Sodium azide	26628-22-8	Present
Inventory - China		
Sodium azide	26628-22-8	Present
Inventory - European Union - European Invento	ry of Existing C	commercial Chemical Substances (EINECS)
Sodium azide	26628-22-8	247-852-1
Inventory - Japan Existing and New Chemical S	ubstances (EN	CS)
Sodium azide	26628-22-8	1-482
Inventory - Korea - Existing and Evaluated Cher	nical Substanc	es
Sodium azide	26628-22-8	KE-31357
Canadian Hazardous Products:		

WHMIS Status

Non-controlled



OSOM® Mono Test Diluent

European Communities Dangerous Substances/Preparations:

EC Hazard Class Symbols



Xn - Harmful

Risk Phrases R22 R32

Harmful if swallowed. Contact with acids liberates very toxic gas.

Safety Phrases S35

This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION

Recommended Use:

For In Vitro Diagnostic Use Only. Not for human or drug use.

Further Information:

This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard Information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labelling of Chemicals.

MSDS Origination Date: January 13, 2005

Version #: 4

Revision Date: June 06, 2007

Disclaimer:

The information above is provided in good faith. It is believed to be accurate and represents the best information currently available to us. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER TYPE, EXPRESSED OR IMPLIED, WITH RESPECT TO PRODUCTS DESCRIBED OR DATA OR INFORMATION PROVIDED, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OF SUCH PRODUCTS, DATA OR INFORMATION. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage and disposal of the material, and must be familiar with and follow generally accepted safe handling procedures. In no event shall Genzyme be liable for any claims, losses, or damages of any individual or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Genzyme has been advised of the possibility of such damages.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Positive Control

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Mono Test Positive Control

Synonym(s): Mono CONTROL +

Product Use: Component of OSOM® Mono Test kit (Catalog # 145 & 145E). For external quality control testing. For In Vitro Diagnostic Use Only.

Description: Aqueous solution containing salt, antibodies (protein) and preservatives.

Corporate Headquarters Genzyme Corporation 500 Kendall Street Cambridge, MA 02142 USA Phone: +1 617-252-7500	Manufacturer/Distributor Genzyme Diagnostics 6659 Top Gun Street San Diego, CA 92121 USA Phone: +1 858-452-3198 Distributor Genzyme Diagnostics 50 Gibson Drive Kings Hill, West Malling Kent, ME19 4AF UK Phone: +44 (0) 1732 220022	Emergency Telephone Numbers Genzyme (U.S.): +1 617-562-4555 CHEMTREC (U.S.): 1-800-424-9300 CHEMTREC (Outside U.S.): +1 703-527-3887
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2. HAZARDS IDENTIFICATION

Precautionary Statements:

CAUTION! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Harmful by ingestion. Allergic skin reaction may result in certain sensitive individuals upon exposure to the aminoglycoside antibiotic in this preparation. Preparation appearance: clear, colorless liquid.

Routes of Exposure:

Occupational exposure routes may include eye contact, skin contact and skin absorption.

Potential Health Effects:

Inhalation	Aerosol inhalation may cause coughing and sore throat.
Eye	Eye exposure may cause irritation, redness and watering.
Skin	Skin contact may cause irritation and possible allergic reaction with itching and rash. Sodium azide may be absorbed through the skin and result in systemic effects.
Ingestion	Ingestion may cause nausea, diarrhea, vomiting, headache, slight lowering of blood pressure, abdominal pain, and a general feeling of apprehension and unwellness.
Chronic Effects	No data available.
Target Organs	Sodium azide: Cardiovascular and central nervous system.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Positive Control

Regulatory Status:

This preparation is classified as hazardous under U.S. OSHA 29 CFR 1910.1200; E.C. Directive 1999/45/EC; Canadian R.S. 1985, c. H-3; U.K. CHIPS 2002 No. 1689; and/or U.N. GHS ST/SG/AC 10/30.

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Potential Environmental Effects:

Unknown.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS #	EC #	% (wt/wt)
Water	7732-18-5	231-791-2	97 - 99
EC R-Phrases: None	EC Hazard Class: None		
Rabbit anti-beef stroma antiserum	Not Assigned	Not Assigned	0.1 - 2
EC R-Phrases: None	EC Hazard Class: None		
Sodium azide	26628-22-8	247-852-1	0.2
EC R-Phrases: R28, R32, R50, R53	EC Hazard Class: T+, N		
Tris(hydroxymethyl)methylamine	77-86-1	201-064-4	0.2
EC R-Phrases: R36/37/38	EC Hazard Class: Xi		
Gentamicin sulfate	1405-41-0	215-778-9	0.05
EC R-Phrases: None	EC Hazard Class: None		

4. FIRST AID MEASURES

Inhalation:

If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:

Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain medical attention if needed or if symptoms, such as redness or irritation persist.

Skin Contact:

In case of contact, flush skin with copious amounts of cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:

In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:

Dilute aqueous solution not considered a fire hazard.

Suitable Extinguishing Media:

Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:

Unknown.



OSOM® Mono Test Positive Control

Specific Hazards Arising from the Chemical:

When heated to decomposition, may produce hydrazoic acid fumes.

Standard Protective Equipment and Precautions for Firefighters:

Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Wash hands thoroughly after handling.

Environmental Precautions:

This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. Follow proper disposal procedures.

Methods and Materials for Containment and Clean-Up:

Absorb spill with inert material/sorbent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. HANDLING AND STORAGE

Handling:

Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage:

Store at 15 to 30°C (59 to 86°F). Keep container tightly closed. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Canada - Quebec - Occupational Exposure Limits - Ceilings				
Sodium azide	26628-22-8	0.11 ppm Ceiling; 0.3 mg/m3 Ceiling		
EU - Occupational Exposure Directive (2)	000/39/EC) Ind	icative Occupational Exposure Limit Values (IOELV) - Skin Notations		
Sodium azide	26628-22-8	possibility of significant uptake through the skin		
EU - Occupational Exposure Directive (2)	000/39/EC) Ind	icative Occupational Exposure Limit Values (IOELV) - STELs		
Sodium azide	26628-22-8	0.3 mg/m3 STEL		
EU - Occupational Exposure Directive (2)	000/39/EC) Ind	icative Occupational Exposure Limit Values (IOELV) - TWAs		
Sodium azide	26628-22-8	0.1 mg/m3 TWA		
Germany - DFG - Recommended Exposu	re Limits - Ceil	lings (Peak Limitations)		
Sodium azide	26628-22-8	0.4 mg/m3 Peak (inhalable fraction)		
Germany - DFG - Recommended Exposure Limits - MAK Values				
Sodium azide	26628-22-8	0.2 mg/m3 MAK (inhalable fraction)		
Germany - TRGS 900 - Occupational Exposure Limits - TWAs				
Sodium azide	26628-22-8	0.2 mg/m3 TWA		
Israel - Occupational Exposure Limits - Ceilings				
Sodium azide	26628-22-8	0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (as Hydrazoic acid, vapor)		
Korea - Occupational Exposure Limits - Ceilings				
Sodium azide	26628-22-8	0.1 ppm Ceiling; 0.3 mg/m3 Ceiling		

Engineering Controls:

This preparation is aqueous and non-volatile and is not expected to require special ventilation measures. Facilities storing or utilizing this preparation should be equipped with an eyewash fountain.



OSOM® Mono Test Positive Control

Personal Protective Equipment (PPE):

Respiratory	A respirator is not required under normal conditions of use.
Eye/Face	Wear appropriate protective chemical safety glasses.
Skin	Wear lab coat or other protective garments. Remove contaminated clothing promptly.
Gloves	Wear chemical resistant protective gloves.
General	Follow company-specific safety procedures.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless liquid	pH:	7.0 (approximate)
Odor:	Not available	Solubility:	Water-soluble
Boiling Point:	Not available	Vapor Pressure:	Not available
Melting Point:	Not applicable	Partition Coefficient	Not available
Freezing Point:	Not available	(n-octanol/water):	
		Vapor Density:	Not available
Flammability/Explosivity Limits in Air, Lower:		Not available	
Flammability/Explosivity Limits in Air, Upper:		Not available	
Auto-Ignition Tempe	rature: Not available		
Flash Point:	Not available		

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

Conditions to Avoid:

Avoid prolonged exposure to direct sunlight.

Incompatible Materials:

Avoid strong oxidizing agents, acids, heavy metals and their salts.

Hazardous Decomposition Products:

None expected under normal conditions of use.

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects:

Toxicology Data - Selected LD50s and LC50s Sodium azide

26628-22-8 Oral LD50 Rat: 27 mg/kg; Dermal LD50 Rabbit: 20 mg/kg

Local Effects:

No data available.

Chronic Effects:

No data available.



OSOM® Mono Test Positive Control

Carcinogenicity:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

ACGIH - Threshold Limits Values - Carcinogens

26628-22-8

A4 - Not Classifiable as a Human Carcinogen (as sodium azide and hydrazoic acid vapor)

Mutagenicity:

Sodium azide

No data available.

Teratogenicity:

No data available.

Reproductive Effects:

No data available.

Sensitization:

Sensitization to aminoglycoside antibiotics may occur with dermal exposure.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity - Freshwater Fish Species Data Sodium azide

26628-22-8

96 Hr LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.7 mg/L; 96 Hr LC50 Pimephales promelas: 5.46 mg/L [flow-through]

Persistance and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Environmental Media:

No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:

This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. If preparation enters drain, flush with a large volume of water to prevent azide build-up. Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:

California - 22 CCR - Presumed Hazardous WastesSodium azide26628-22-8Ignitable; ReactiveRCRA (Resource Conservation & Recovery Act)- P Series Wastes - Acutely Toxic WastesSodium azide26628-22-8waste number P105

14. TRANSPORT INFORMATION

Basic Shipping Description:

Not classified as dangerous goods. Not regulated per IATA and DOT regulations.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Positive Control

15. REGULATORY INFORMATION

US Federal Regulations:

This preparation is a component of an FDA-regulated in vitro diagnostic device.

CERCLA/SARA - Hazardous Substances and the		
Sodium azide	26628-22-8	1000 lb final RQ; 454 kg final RQ
CERCLA/SARA - Section 302 Extremely Hazarde		
Sodium azide	26628-22-8	1000 lb EPCRA RQ
CERCLA/SARA - Section 302 Extremely Hazarde	ous Substances	s TPQs
Sodium azide	26628-22-8	500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)
CERCLA/SARA - Section 313 - Emission Report	ing	
Sodium azide	26628-22-8	1.0 % de minimis concentration
Inventory - United States - Section 8(b) Inventor	y (TSCA)	
Sodium azide	26628-22-8	Present
US State Regulations:		
California - 8 CCR Section 339 - Director's List of	of Hazardous Si	ubstances
Sodium azide	26628-22-8	Present
International Regulations:		
_		
If approved for European Communities use, this pro (98/79/EC).	oduct is regulate	d under the In Vitro Diagnostic Medical Devices Directive
Canada - WHMIS - Classifications of Substances	S	
Sodium azide	26628-22-8	D1A
Canada - WHMIS - Ingredient Disclosure List		
Sodium azide	26628-22-8	1 %
EU - Dangerous Substances Directive (67/548/E	EC) - Annex I -	Classification
Sodium azide	26628-22-8	T+;R28 R32 N;R50-53
EU - Dangerous Substances Directive (67/548/E	EC) - Annex I -	
Sodium azide	26628-22-8	S:1/2-28-45-60-61
Germany - Water Classification (VwVwS) - Anne	x 2 - Water Haz	ard Classes
Sodium azide	26628-22-8	ID Number 636, hazard class 2 - hazard to waters
Inventory - Australia - Inventory of Chemical Su	bstances (AICS	,
Sodium azide	26628-22-8	Present
Inventory - Canada - Domestic Substances List	(DSL)	
Sodium azide	26628-22-8	Present
Inventory - China		
Sodium azide	26628-22-8	Present
Inventory - European Union - European Inventor		
Sodium azide	26628-22-8	247-852-1
Inventory - Japan Existing and New Chemical S		
Sodium azide	26628-22-8	1-482
Inventory - Korea - Existing and Evaluated Cher		
Sodium azide	26628-22-8	KE-31357
Canadian Hazardous Products:		

WHMIS Status Non-controlled



OSOM® Mono Test Positive Control

European Communities Dangerous Substances/Preparations:

EC Hazard Class Symbols





Risk Phrases R22 Harmful if swallowed. R32 Contact with acids liberates very toxic gas. Safety Phrases S35

This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION

Recommended Use:

For In Vitro Diagnostic Use Only. Not for human or drug use.

Further Information:

This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard Information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labelling of Chemicals.

MSDS Origination Date: January 13, 2005

Version #: 4

Revision Date: June 06, 2007

Disclaimer:

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MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Negative Control

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Mono Test Negative Control

Synonym(s): Mono CONTROL -

Product Use: Component of OSOM® Mono Test kit (Catalog # 145 & 145E). For external quality control testing. For In Vitro Diagnostic Use Only.

Description: Aqueous solution containing salt, goat serum, and preservatives.

Corporate Headquarters Genzyme Corporation 500 Kendall Street Cambridge, MA 02142 USA Phone: +1 617-252-7500	Manufacturer/DistributorGenzyme Diagnostics6659 Top Gun StreetSan Diego, CA 92121USAPhone: +1 858-452-3198DistributorGenzyme Diagnostics50 Gibson DriveKings Hill, West MallingKent, ME19 4AFUKPhone: +44 (0) 1732 220022	Emergency Telephone Numbers Genzyme (U.S.): +1 617-562-4555 CHEMTREC (U.S.): 1-800-424-9300 CHEMTREC (Outside U.S.): +1 703-527-3887
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2. HAZARDS IDENTIFICATION

Precautionary Statements:

CAUTION! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Contains animal-source material (goat serum albumin of US origin). Harmful by ingestion. Preparation appearance: clear, colorless liquid.

Routes of Exposure:

Occupational exposure routes may include eye contact, skin contact and skin absorption.

Potential Health Effects:

Inhalation	Aerosol inhalation may cause coughing and sore throat.
Еуе	Eye exposure may cause irritation, redness and watering.
Skin	Skin contact may cause irritation, dryness and redness. Sodium azide may be absorbed through the skin and result in systemic effects.
Ingestion	Ingestion may cause nausea, diarrhea, vomiting, headache, slight lowering of blood pressure, abdominal pain, and a general feeling of apprehension and unwellness.
Chronic Effects	No data available.
Target Organs	Sodium azide: Cardiovascular and central nervous system.

Regulatory Status:

This preparation is classified as hazardous under U.S. OSHA 29 CFR 1910.1200; E.C. Directive 1999/45/EC; Canadian R.S. 1985, c. H-3; U.K. CHIPS 2002 No. 1689; and/or U.N. GHS ST/SG/AC 10/30.

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.



OSOM® Mono Test Negative Control

Potential Environmental Effects: Unknown.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS #	EC #	% (wt/wt)
Water	7732-18-5	231-791-2	99.3
EC R-Phrases: None	EC Hazard Class: None		
Tris(hydroxymethyl)methylamine	77-86-1	201-064-4	0.3
EC R-Phrases: R36/37/38	EC Hazard Class: Xi		
Goat serum albumin	Not Assigned	Not Assigned	0.2
EC R-Phrases: None	EC Hazard Class: None		
Sodium azide	26628-22-8	247-852-1	0.2
EC R-Phrases: R28, R32, R50, R53	EC Hazard Class: T+, N		

4. FIRST AID MEASURES

Inhalation:

If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:

Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain medical attention if needed or if symptoms, such as redness or irritation persist.

Skin Contact:

In case of contact, flush skin with copious amounts of cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:

In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:

Dilute aqueous solution not considered a fire hazard.

Suitable Extinguishing Media:

Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:

Unknown.

Specific Hazards Arising from the Chemical:

When heated to decomposition, may produce hydrazoic acid fumes.

Standard Protective Equipment and Precautions for Firefighters:

Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Negative Control

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Wash hands thoroughly after handling.

Environmental Precautions:

This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. Follow proper disposal procedures.

Methods and Materials for Containment and Clean-Up:

Absorb spill with inert material/sorbent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. HANDLING AND STORAGE

Handling:

Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage:

Store at 15 to 30°C (59 to 86°F). Keep container tightly closed. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

Canada - Quebec - Occupational Exposure Limits - Ceilings Sodium azide 26628-22-8 0.11 ppm Ceiling; 0.3 mg/m3 Ceiling EU - Occupational Exposure Directive (2000/39/EC) Indicative Occupational Exposure Limit Values (IOELV) - Skin Notations possibility of significant uptake through the skin Sodium azide 26628-22-8 EU - Occupational Exposure Directive (2000/39/EC) Indicative Occupational Exposure Limit Values (IOELV) - STELs Sodium azide 26628-22-8 0.3 mg/m3 STEL EU - Occupational Exposure Directive (2000/39/EC) Indicative Occupational Exposure Limit Values (IOELV) - TWAs Sodium azide 26628-22-8 0.1 mg/m3 TWA Germany - DFG - Recommended Exposure Limits - Ceilings (Peak Limitations) 26628-22-8 0.4 mg/m3 Peak (inhalable fraction) Sodium azide Germany - DFG - Recommended Exposure Limits - MAK Values 0.2 mg/m3 MAK (inhalable fraction) Sodium azide 26628-22-8 Germany - TRGS 900 - Occupational Exposure Limits - TWAs Sodium azide 26628-22-8 0.2 mg/m3 TWA Israel - Occupational Exposure Limits - Ceilings Sodium azide 26628-22-8 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (as Hydrazoic acid, vapor) Korea - Occupational Exposure Limits - Ceilings Sodium azide 26628-22-8 0.1 ppm Ceiling; 0.3 mg/m3 Ceiling

Engineering Controls:

This preparation is aqueous and non-volatile and is not expected to require special ventilation measures. Facilities storing or utilizing this preparation should be equipped with an eyewash fountain.

Personal Protective Equipment (PPE):

Respiratory	A respirator is not required under normal conditions of use.
Eye/Face	Wear appropriate protective chemical safety glasses.
Skin	Wear lab coat or other protective garments. Remove contaminated clothing promptly.



OSOM® Mono Test Negative Control

Personal Protective Equipment (PPE):

Gloves Wear chemical resistant protective gloves.

General Follow company-specific safety procedures.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless liquid	pH:	8.0 (approximate)
Odor:	Not available	Solubility:	Water-soluble
Boiling Point:	Not available	Vapor Pressure:	Not available
Melting Point:	Not applicable	Partition Coefficient	Not available
Freezing Point:	Not available	(n-octanol/water):	
U		Vapor Density:	Not available
Flammability/Explo	sivity Limits in Air, Lower:	Not available	
Flammability/Explosivity Limits in Air, Upper:		Not available	
Auto-Ignition Temp	perature: Not available		
Flash Point:	Not available		

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

Conditions to Avoid:

Avoid prolonged exposure to direct sunlight.

Incompatible Materials:

Avoid strong oxidizing agents, acids, heavy metals and their salts.

Hazardous Decomposition Products:

None expected under normal conditions of use.

Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects:

Toxicology Data - Selected LD50s and LC50s Sodium azide

26628-22-8

2-8 Oral LD50 Rat: 27 mg/kg; Dermal LD50 Rabbit: 20 mg/kg

Local Effects:

No data available.

Chronic Effects:

No data available.

Carcinogenicity:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

26628-22-8

ACGIH - Threshold Limits Values - Carcinogens Sodium azide

A4 - Not Classifiable as a Human Carcinogen (as sodium azide and hydrazoic acid vapor)

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Negative Control

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N/	111113	20	nin	141/1
IV	iulo	IUC	IIIU	ity:
				,

No data available.
Teratogenicity:
No data available.
Reproductive Effects:
No data available.
Sensitization:
No data available.

12. ECOLOGICAL INFORMATION

26628-22-8

Ecotoxicity:

Ecotoxicity - Freshwater Fish Species Data Sodium azide

96 Hr LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.7 mg/L; 96 Hr LC50 Pimephales promelas: 5.46 mg/L [flow-through]

Persistance and Degradability:

No data available.

Bioaccumulative Potential:

No data available.

Mobility in Environmental Media:

No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:

This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. If preparation enters drain, flush with a large volume of water to prevent azide build-up. Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:

California - 22 CCR - Presumed Hazardous WastesSodium azide26628-22-8Ignitable; ReactiveRCRA (Resource Conservation & Recovery Act) - P Series Wastes - Acutely Toxic WastesSodium azide26628-22-8waste number P105

14. TRANSPORT INFORMATION

Basic Shipping Description:

Not classified as dangerous goods. Not regulated per IATA and DOT regulations.

MATERIAL SAFETY DATA SHEET

OSOM® Mono Test Negative Control

15. REGULATORY INFORMATION

US Federal Regulations:

This preparation is a component of an FDA-regulated in vitro diagnostic device.

CERCLA/SARA - Hazardous Substances and th	-	Quantities
Sodium azide	26628-22-8	1000 lb final RQ; 454 kg final RQ
CERCLA/SARA - Section 302 Extremely Hazard	ous Substance	s EPCRA RQs
Sodium azide	26628-22-8	1000 lb EPCRA RQ
CERCLA/SARA - Section 302 Extremely Hazard	ous Substance	s TPQs
Sodium azide	26628-22-8	500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)
CERCLA/SARA - Section 313 - Emission Report	ina	
Sodium azide	26628-22-8	1.0 % de minimis concentration
Inventory - United States - Section 8(b) Inventor		
Sodium azide	26628-22-8	Present
	20020 22 0	rioont
US State Regulations:		
California - 8 CCR Section 339 - Director's List of	of Hazardous S	ubstances
Sodium azide	26628-22-8	Present
	20020 22 0	rioont
International Regulations:		
If approved for European Communities use, this pro (98/79/EC).	oduct is regulate	d under the In Vitro Diagnostic Medical Devices Directive
Canada - WHMIS - Classifications of Substance	6	
Sodium azide	26628-22-8	D1A
	20020-22-0	DIA
Canada - WHMIS - Ingredient Disclosure List		1 %
Sodium azide	26628-22-8	
EU - Dangerous Substances Directive (67/548/E	,	
Sodium azide	26628-22-8	T+;R28 R32 N;R50-53
EU - Dangerous Substances Directive (67/548/E	•	•
Sodium azide	26628-22-8	S:1/2-28-45-60-61
Germany - Water Classification (VwVwS) - Anne		
Sodium azide	26628-22-8	ID Number 636, hazard class 2 - hazard to waters
Inventory - Australia - Inventory of Chemical Su	•	•
Sodium azide	26628-22-8	Present
Inventory - Canada - Domestic Substances List		
Sodium azide	26628-22-8	Present
Inventory - China		
Sodium azide	26628-22-8	Present
Inventory - European Union - European Invento	ry of Existing C	Commercial Chemical Substances (EINECS)
Sodium azide	26628-22-8	247-852-1
Inventory - Japan Existing and New Chemical S	ubstances (EN	CS)
Sodium azide	26628-22-8	1-482
Inventory - Korea - Existing and Evaluated Cher	mical Substanc	es
Sodium azide	26628-22-8	KE-31357
Canadian Hazardous Products:		

WHMIS Status

Non-controlled



OSOM® Mono Test Negative Control

European Communities Dangerous Substances/Preparations:

EC Hazard Class Symbols





Risk Phrases R22 R32

S35

Harmful if swallowed. Contact with acids liberates very toxic gas.

Safety Phrases

This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION

Recommended Use:

For In Vitro Diagnostic Use Only. Not for human or drug use.

Further Information:

This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard Information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labelling of Chemicals.

MSDS Origination Date: January 13, 2005

Version #: 4

Revision Date: June 06, 2007

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