

Material Safety Data Sheet

E.Z.N.A.[®] Mag-Bind[®] Blood DNA Large Scale Kit



Omega Bio-Tek, Inc.

1850-E Beaver Ridge Circle, Norcross, GA 30071, USA.

Tel: (770) 931-8400. Fax: (770) 931-0230.

Mail: info@omegabiotek.com

www.omegabiotek.com

Material Safety Data Sheet

Trade Name: Elution Buffer

Date of Issue: 8/20/2004

1. Product and manufacturer information

Product Information:

Trade Name: Elution Buffer

Manufacturer: Omega Bio-Tek, Inc., 1850-E Beaver Ridge Circle, Norcross, GA
30071 Tel: (770) 931.8400. Fax: (770) 931.0230.

Toll Free Tel: 1(800) 832.8896

2. Composition:

Chemical Characteristics: Aqueous solution of Tris (hydroxymethyl) amino methane/Hydrochloric acid.

Hazardous Components: According to OSHR 29 CFR & 1910.1200, any mixture that contains less than 1% by weight or volume of a non-carcinogenic hazardous component is not considered hazardous, unless there is evidence to the contrary. We do not consider Solution I to be hazardous. However gloves, lab coats and protective eyewear are recommended when using any chemical reagents.

3. Hazardous Identification:

Not Applicable

4. First Aid:

Remove contaminated clothing and call physician.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 20 minutes adequate flushing is achieved by separating eyelids, clean fingers.

In case of skin contact: Immediately wash skin with soap and copious amounts of water.

If inhaled: Remove to an area with fresh air. Give artificial respiration if not Breathing and call medical emergency services. Oxygen may be required if respiration is difficult.

If swallowed: Wash out mouth with water only if conscious.

5. Fire-Fighting Measures

Extinguishing media: Use appropriate, non-combustible extinguishing media.

Special Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

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Trade Name: Elution Buffer

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6. Accidental Measures:

Precautionary Measures: Wear self-contained breathing apparatus, protective eyewear/goggles, rubber boots and thick rubber gloves.

Clean-up Procedure: Absorb on vermiculite or sand. Place in closed containers for disposal. Finally ventilate area and wash spills when pick-up is complete.

7. Handling and Storage:

Storage: Store tightly closed at 22-25°C.

8. Exposure Controls:

Rubber gloves, protective eyewear, NIOSH/MSH A-approved respirator, Safety shower and eye wash bottle. Wash hands thoroughly after handling. Do not get into eyes, on skin or on clothing.

9. Physical and Chemical Properties:

Physical State:	liquid	
Color:	colorless	
Odor:	odorless	
pH:	(25°C)	7.5
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		N/A
Ignition Temp:		N/A
Flashpoint:		N/A
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	1.07 g/cm ³
Water Solubility:	(25°C)	Soluble

10. Stability and Reactivity:

Substances to avoid: N/A

Hazardous combustion or Decomposition products: Nature of decomposition products not known.

Material Safety Data Sheet

Trade Name: Elution Buffer

Date of Issue: 8/20/2004

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of:	
Inhalation:	May be harmful by inhalation.
Eye Contact:	May cause irritation.
Skin Contact:	May cause irritation.
Ingestion:	May be harmful if swallowed.
Prolonged exposure:	N/A
Chronic Effects:	N/A
RTECS Numbers:	N/A

12. Ecological Data:

This product presents no specific danger to the environment.

13. Disposal:

For small quantities flush down sink with water. Make sure to observe all Federal, State and Local laws and requirements.

14. Transport Data:

N/A

15. Regulatory Data:

N/A

16. Other Data:

The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Omega Bio-Tek shall not be held liable for consequences resulting from handling or from contact with the above product.

Material Safety Data Sheet

Trade Name: MP Buffer
Date of Issue: 6/05/2007

1. Product and manufacturer information

Product Information:

Trade Name: MP Buffer
Manufacturer: Omega Bio-Tek, Inc.
1850-E Beaver Ridge Circle, Norcross, GA 30071
Tel: (770) 931.8400. Fax: (770) 931.0230.

2. Composition:

Chemical Characteristics: Aqueous solution of Guanidine Hydrochloride
Hazardous components: 50-1-1 Guanidine Hydrochloride (<50%)
Toxicity Data: ORL-RAT LD50: 475mg/kg NTIS AD-AI65-747
IPR-MUS LD50: 500mg/kg NTIS AD-277-689

3. Hazardous Identification:

Harmful by inhalation, absorbed through the skin or if swallowed.
Labeling: Xn, harmful, flammable, R 20/21/22-36/38.

4. First Aid: remove contaminated clothing and call physician.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 20 minutes. Adequate flushing is achieved by separating eyelids with clean fingers.
In case of skin contact: Immediately wash skin with soap and copious amounts of water.
If inhaled: Remove to an area with fresh air. Give artificial respiration if not breathing and call medical emergency services. Oxygen may be required if respiration is difficult. Immediately call a doctor.
If swallowed: Wash out mouth with water only if conscious.

5. Fire-Fighting Measures

Extinguishing media: Carbon dioxide, dry chemical powder or appropriate foam.
Special Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

6. Accidental Release Measures:

Precautionary Measures: Wear self-contained breathing apparatus, protective eyewear, goggles, rubber boots and /thick rubber gloves.

Material Safety Data Sheet

Trade Name: MP Buffer

Date of Issue: 6/05/2007

Clean-up Procedure: Absorb on vermiculite or sand. Place in closed containers for disposal. Use non-sparking tools. Finally ventilate area and wash spills when pick-up is complete.

7. Handling and Storage:

Storage: Store tightly at 22-25°C

8. Exposure Controls:

Rubber gloves, protective eyewear, NIOSH/MSH A-approved respirator, Safety shower and eye wash bottle. Mechanical exhaust required. Wash hands thoroughly after handling. Do not get into eyes, on skin or on clothing.

9. Physical and Chemical Properties:

Physical State:	liquid	
Color:	amber	
Odor:	odorless	
pH:	(25°C)	N/A
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		N/A
Ignition Temp:		N/A
Flashpoint:		>70°C
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	1.150 g/cm ³
Water Solubility:	(25°C)	Soluble

10. Stability and Reactivity:

Substances to avoid: Strong acids and strong oxidants

Hazardous combustion or decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides and hydrogen cyanide.

Material Safety Data Sheet

Trade Name: MP Buffer

Date of Issue: 6/05/2007

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of Inhalation:	May be harmful by inhalation. Material is disruptive to mucous membranes and upper respiratory tract.
Eye Contact:	Causes severe irritation
Skin Contact:	Causes skin irritation. Harmful by skin absorption
Ingestion:	Harmful if swallowed.
Prolonged exposure:	N/A
Chronic Effects:	N/A
RTECS Numbers:	MF4300000
Additional Information:	Handle with normal caution accorded to chemicals. Other harmful Properties cannot be ruled out.

12. Ecological Data:

N/A

13. Disposal:

Contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste. Contaminated packaging should be handled in the same manner as the substance itself. Unless specified directly, non-contaminated packaging may be treated as household waste.

14. Transport Data:

N/A

15. Regulatory Data:

Labeling: Xn, harmful, flammable, R 20/22-36/38.

16. Other Data:

The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Omega Bio-Tek shall not be held liable for consequences resulting from handling or from contact with the above product.

Material Safety Data Sheet

Trade Name: MSL Buffer

Date of Issue: 4/12/1997

1. Product and manufacturer information

Product Information:

Trade Name: MSL Buffer
Manufacturer: Omega Bio-Tek, Inc.
1850-E Beaver Ridge Circle, Norcross, GA 30071
Tel: (770) 931.8400. Fax: (770) 931.0230.

2. Composition:

Chemical Characteristics: Aqueous solution of Guanidine Hydrochloride
Hazardous components: 50-1-1 Guanidine Hydrochloride (<50%)
Toxicity Data: ORL-RAT LD50: 475mg/kg NTIS AD-AI65-747
IPR-MUS LD50: 500mg/kg NTIS AD-277-689

3. Hazardous Identification:

Toxic, harmful by inhalation, if swallowed and absorbed through the skin.

Labeling: Xn, harmful, flammable, R 20/21/22-36/38.

4. First Aid: remove contaminated clothing and call physician.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 20 minutes.
Adequate flushing is achieved by separating eyelids with clean fingers.
In case of skin contact: Immediately wash skin with soap and copious amounts of water.
If inhaled: Remove to an area with fresh air. Give artificial respiration if not breathing and call medical emergency services. Oxygen may be required if respiration is difficult. Immediately call a doctor.
If swallowed: Wash out mouth with water only if conscious.

5. Fire-Fighting Measures

Extinguishing media: Extinguishing media, Carbon dioxide, dry chemical powder or appropriate foam.
Special Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

6. Accidental Release Measures:

Precautionary Measures: Wear self-contained breathing apparatus, protective eyewear, goggles, rubber boots and thick rubber gloves.

Material Safety Data Sheet

Trade Name: MSL Buffer

Date of Issue: 4/12/1997

Clean-up Procedure: Absorb on vermiculite or sand. Place in closed containers for disposal. Use non-sparking tools. Finally ventilate area and wash spills when pick-up is complete.

7. Handling and Storage:

Storage: Store tightly at 22-25°C

8. Exposure Controls:

Rubber gloves, protective eyewear, NIOSH/MSH A-approved respirator, Safety shower and eye wash bottle. Mechanical exhaust required. Wash hands thoroughly after handling. Do not get into eyes, on skin or on clothing.

9. Physical and Chemical Properties:

Physical State:	liquid	
Color:	amber	
Odor:	odorless	
pH:	(25°C)	N/A
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		N/A
Ignition Temp:		N/A
Flashpoint:		>70°C
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	1.150 g/cm ³
Water Solubility:	(25°C)	Soluble

10. Stability and Reactivity:

Substances to avoid: Strong acids and strong oxidants

Hazardous combustion or decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides and hydrogen chloride gas.

Material Safety Data Sheet

Trade Name: MSL Buffer

Date of Issue: 4/12/1997

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of Inhalation:	May be harmful by inhalation. Material is disruptive to mucous membranes and upper respiratory tract.
Eye Contact:	Causes severe irritation
Skin Contact:	Causes skin irritation. Harmful by skin absorption
Ingestion:	Harmful if swallowed.
Prolonged exposure:	N/A
Chronic Effects:	N/A
RTECS Numbers:	MF4300000
Additional Information:	Handle with normal caution accorded to chemicals. Other harmful Properties cannot be ruled out.

12. Ecological Data:

N/A

13. Disposal:

Contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste. Contaminated packaging should be handled in the same manner as the substance itself. Unless specified directly, non-contaminated packaging may be treated as household waste.

14. Transport Data:

N/A

15. Regulatory Data:

Labeling: Xn, harmful, flammable, R 20/22-36/38.

16. Other Data:

The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Omega Bio-Tek shall not be held liable for consequences resulting from handling or from contact with the above product.

Material Safety Data Sheet

Trade Name: Proteinase K

Date of Issue: 9/12/2005

1. Product and manufacturer information

Product Information:

Trade Name: Proteinase K
Manufacturer: Omega Bio-Tek, Inc.
1850-E Beaver Ridge Circle, Norcross, GA 30071
Tel: (770) 931.8400. Fax: (770) 931.0230.

2. Composition:

Chemical Characteristics: Proteinase
254-457-8 Proteinase

3. Hazardous Identification:

Hazard Description: Harmful, May cause sensitization by inhalation and skin contact.

Classification System:

NFPA Ratings (Scale 0-4): Health = 1; Fire = 0; Reactivity = 0

WHMIS Ratings (Scale 0-4): Health = 1; Fire = 0; Reactivity = 0

4. First Aid: remove contaminated clothing and call physician.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 20 minutes.
Adequate flushing is achieved by separating eyelids with clean fingers.

In case of skin contact: Immediately wash skin with soap and copious amounts of water then consult a doctor.

If inhaled: Remove to an area with fresh air. Consult doctor if necessary.

If swallowed: Call doctor immediately.

5. Fire-Fighting Measures

Extinguishing media: Carbon dioxide, dry chemical powder or appropriate foam.

Special Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

6. Accidental Release Measures:

Precautionary Measures: No Special measure required.

Clean-up Procedure: Pick up mechanically.

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Date of Issue: 9/12/2005

7. Handling and Storage:

Storage: No special measure required.

8. Exposure Controls:

Rubber gloves, protective eyewear, NIOSH/MSH A-approved respirator, Safety shower and eye wash bottle. Wash hands thoroughly after handling. Do not get into eyes, on skin or on clothing. Do not breathe vapor, Sever eye irritant. Keep well away from heat, spark and open flame. Store in cool dry place.

9. Physical and Chemical Properties:

Physical State:	solid	
Color:	white	
Odor:	characteristic	
pH:	(25°C)	N/A
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		N/A
Ignition Temp:		N/A
Flashpoint:		>70°C
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	N/A
Water Solubility:	(25°C)	Soluble

10. Stability and Reactivity:

Substances to avoid:	None
Hazardous combustion or Decomposition products:	None

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of:	N/A

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Date of Issue: 9/12/2005

Inhalation:	Irritating
Eye Contact:	Irritating
Skin Contact:	Irritating
Ingestion:	N/A
Prolonged exposure:	N/A
Chronic Effects:	N/A
RTECS Numbers:	N/A
Additional Information:	Handle with normal caution accorded to chemicals. Other harmful Properties cannot be rules out.

12. Ecological Data:

N/A

13. Disposal:

No special method required. Observe all federal, state and local laws.

14. Transport Data:

N/A

15. Regulatory Data:

N/A

16. Other Data:

The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Omega Bio-Tek shall not be held liable for consequences resulting from handling or from contact with the above product.

Material Safety Data Sheet

Trade Name: RNase A
Date of Issue: 4/12/2005

1. Product and manufacturer information

Product Information:

Trade Name: RNase A
Manufacturer: Omega Bio-Tek, Inc.
1850-E Beaver Ridge Circle, Norcross, GA 30071
Tel: (770) 931.8400. Fax: (770) 931.0230.

2. Composition:

Chemical Characteristics: Aqueous solution of RNase A
9001-99-4 RNase A (Enzyme Protein)

3. Hazardous Identification:

May be harmful if swallowed. May be irritating to eyes and skin.

Labeling: Xn, corrosive, harmful R36/37/38-42/43

4. First Aid: remove contaminated clothing and call physician.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 20 minutes. Adequate flushing is achieved by separating eyelids with clean fingers.
In case of skin contact: Immediately wash skin with soap and copious amounts of water then consult a doctor.
If inhaled: Remove to an area with fresh air. Consult doctor if necessary.
If swallowed: Call doctor immediately.

5. Fire-Fighting Measures

Extinguishing media: Use appropriate non-combustible extinguishing media.
Special Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

6. Accidental Release Measures:

Precautionary Measures: Wear self-contained breathing apparatus, protective eyewear/goggles, rubber boots and thick rubber gloves.
Clean-up Procedure: Absorb on vermiculite or sand. Place in closed containers for disposal. Finally ventilate area and wash spills when pick-up is complete.

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Trade Name: RNase A
Date of Issue: 4/12/2005

7. Handling and Storage:

Storage: Store tightly closed at 22-25°C.

8. Exposure Controls:

Rubber gloves, protective eyewear, NIOSH/MSH A-approved respirator, Safety shower and eye wash bottle. Wash hands thoroughly after handling. Do not get into eyes, on skin or on clothing.

9. Physical and Chemical Properties:

Physical State:	liquid	
Color:	colorless	
Odor:	odorless	
pH:	(25°C)	N/A
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		N/A
Ignition Temp:		N/A
Flashpoint:		N/a
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	1.12 g/cm ³
Water Solubility:	(25°C)	Soluble

10. Stability and Reactivity:

Substances to avoid:	Strong oxidizing agents.
Hazardous combustion or Decomposition products:	Carbon monoxide, carbon dioxide, nitrogen oxide and hydrogen chloride gas.

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of:	
Inhalation:	May be harmful by inhalation.
Eye Contact:	Destructive to eye.

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Trade Name: RNase A

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Skin Contact:	Destructive to skin, harmful by skin absorption.
Ingestion:	Harmful if swallowed.
Prolonged exposure:	N/A
Chronic Effects:	N/A
RTECS Numbers:	N/A
Additional Information:	Handle with normal caution accorded to chemicals. Other harmful Properties cannot be rules out.

12. Ecological Data:

This product presents no specific danger to the environment.

13. Disposal:

For small quantities flush down sink with water. Make sure to observe all federal, state and local laws and requirements.

14. Transport Data:

N/A

15. Regulatory Data:

Labeling: Xn, corrosive, harmful R36/37/38-42/43

16. Other Data:

The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Omega Bio-Tek shall not be held liable for consequences resulting from handling or from contact with the above product.

Material Safety Data Sheet

Trade Name: SPM Wash Buffer

Date of Issue: 9/12/2005

1. Product and manufacturer information

Product Information:

Trade Name: SPM Wash Buffer

Manufacturer: Omega Bio-Tek, Inc., 1850-E Beaver Ridge Circle, Norcross, GA
30071 Tel: (770) 931.8400. Fax: (770) 931.0230.

Toll Free Tel: 1(800) 832.8896

2. Composition:

Chemical Characteristics: Aqueous solution of proprietary compounds mixture.

Hazardous Components: According to OSHR 29 CFR & 1910.1200, any mixture that contains less than 1% by weight or volume of a non-carcinogenic hazardous component is not considered hazardous, unless there is evidence to the contrary. We do not consider SPM Buffer to be hazardous. However gloves, lab coats and protective eyewear are recommended when using any chemical reagents.

3. Hazardous Identification:

May be harmful if swallowed. May be irritating to eyes and skin

4. First Aid: remove contaminated clothing and call physician.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 20 minutes adequate flushing is achieved by separating eyelids, clean fingers.

In case of skin contact: Immediately wash skin with soap and copious amounts of water.

If inhaled: Remove to an area with fresh air. Give artificial respiration if not Breathing and call medical emergency services. Oxygen may be required if respiration is difficult.

If swallowed: Wash out mouth with water only if conscious.

5. Fire-Fighting Measures

Extinguishing media: Use appropriate, non-combustible extinguishing media.

Special Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

6. Accidental Measures:

Precautionary Measures: Wear self-contained breathing apparatus, protective eyewear/goggles,

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rubber boots and thick rubber gloves.

Clean-up Procedure:

Absorb on vermiculite or sand. Place in closed containers for disposal. Finally ventilate area and wash spills when pick-up is complete.

7. Handling and Storage:

Storage:

Store tightly closed at 22-25°C.

8. Exposure Controls:

Rubber gloves, protective eyewear, NIOSH/MSH A-approved respirator, Safety shower and eye wash bottle.

Mechanical exhaust required. Keep tightly closed. Wash hands thoroughly after handling. Do not get into eyes, on skin or on clothing. Do not breathe vapor. Sever eye irritant

9. Physical and Chemical Properties:

Physical State:	liquid	
Color:	colorless	
Odor:	odorless	
pH:	(25°C)	7.5
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		N/A
Ignition Temp:		N/A
Flashpoint:		N/A
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	1.010 g/cm ³
Water Solubility:	(25°C)	Soluble

10. Stability and Reactivity:

Substances to avoid:

N/A

Hazardous combustion or

Nature of decomposition products not known.

Decomposition products:

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11. Toxicological Data:

Toxicity Data N/A

Acute Effects of:

Inhalation: May be harmful by inhalation.

Eye Contact: May cause irritation.

Skin Contact: May cause irritation.

Ingestion: May be harmful if swallowed.

Prolonged exposure: N/A

Chronic Effects: N/A

RTECS Numbers: N/A

Additional Information: Handle with normal caution accorded to chemicals. Other harmful properties cannot be ruled out.

12. Ecological Data:

This product presents no specific danger to the environment.

13. Disposal:

For small quantities flush down sink with water. Make sure to observe all federal, state and local laws and requirements.

14. Transport Data:

N/A

15. Regulatory Data:

N/A

16. Other Data:

The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Omega Bio-Tek shall not be held liable for consequences resulting from handling or from contact with the above product.