

Material Safety Data Sheet

E.Z.N.A. 96[®] Mag-Bind[®] mRNA Kit

E-Z 96[®] Mag-Bind[®] mRNA Enrichment Kit



Omega Bio-Tek, Inc.

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

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

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Material Safety Data Sheet

Trade Name: 2x Mag-Bind mRNA Binding Buffer

Date of Issue: 02/12/2007

1. Product and manufacturer information

Product Information:

Trade Name: 2x Mag-Bind mRNA Binding 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 propriety mix of proprietary compounds mixture.
Hazardous Components: 151-21-3 Sodium Dodecyl Sulphate.

3. Hazardous Identification:

N/A

Classification System: The classification was made according to the latest edition of international substances list and expend upon from company and literature data.

NFPA Ratings (Scale: 0-4)

Health = 0; Fire = 0; Reactivity = 0

WHIMIS Ratings (Scale: 0-4)

Health = 0; Fire = 0; Reactivity = 0

4. First Aid:

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.

If swallowed: Call a Physician immediately.

5. Fire-Fighting Measures

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

Material Safety Data Sheet

Trade Name: 2x Mag-Bind mRNA Binding Buffer

Date of Issue: 02/12/2007

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.

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. Severe eye irritant

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)	1.050 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: Danger of toxic pyrolysis products.

Material Safety Data Sheet

Trade Name: 2x Mag-Bind mRNA Binding Buffer

Date of Issue: 02/12/2007

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of:	
Inhalation:	May be harmful by inhalation. Material is sensitive to mucous membranes and upper respiratory tract.
Eye Contact:	Causes irritation
Skin Contact:	Causes skin irritation. 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 ruled out.

12. Ecological Data:

Water hazardous class 2 (self-assessment): hazardous for water. Do not allow product to reach ground water course or sewage system. Danger to drinking water if even small quantities leak into the ground

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 led in the same manner as the substance itself. Unless specified directly, non-contaminated packaging may be treated as house hold waste.

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: Mag-Bind mRNA Elution Buffer

Date of Issue: 4/12/2007

1. Product and manufacturer information

Product Information:

Trade Name: Mag-Bind mRNA 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:

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:

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

4. First Aid:

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.

Material Safety Data Sheet

Trade Name: Mag-Bind mRNA Elution Buffer

Date of Issue: 4/12/2007

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 2°- 4°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)	1.010 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: Mag-Bind mRNA Elution Buffer

Date of Issue: 4/12/2007

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: Mag-Bind mRNA Wash Buffer

Date of Issue: 02/12/2007

1. Product and manufacturer information

Product Information:

Trade Name: Mag-Bind mRNA Wash 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 propriety mix of proprietary compounds mixture.
Hazardous Components: 151-21-3 Sodium Dodecyl Sulphate.

3. Hazardous Identification:

N/A

Classification System: The classification was made according to the latest edition of international substances list and expend upon from company and literature data.

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

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

4. First Aid:

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.

If swallowed: Call a Physician immediately.

5. Fire-Fighting Measures

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

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

Material Safety Data Sheet

Trade Name: Mag-Bind mRNA Wash Buffer

Date of Issue: 02/12/2007

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.

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. Severe eye irritant

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)	1.050 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: Danger of toxic pyrolysis products.

Decomposition products:

Material Safety Data Sheet

Trade Name: Mag-Bind mRNA Wash Buffer

Date of Issue: 02/12/2007

11. Toxicological Data:

Toxicity Data	N/A
Acute Effects of:	
Inhalation:	May be harmful by inhalation.
Eye Contact:	In case of contact, immediately flush eyes with copious amounts of water
Skin Contact:	Causes skin irritation. 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 ruled out.

12. Ecological Data:

Water hazardous class 2 (self-assessment): hazardous for water. Do not allow product to reach ground water course or sewage system. Danger to drinking water if even small quantities leak into the ground

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 led in the same manner as the substance itself. Unless specified directly, non-contaminated packaging may be treated as house hold waste.

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: Oligo (dT) Magnetic Beads

Date of Issue: 4/14/2007

1. Product and manufacturer information

Product Information:

Trade Name: Oligo (dT) Magnetic Beads

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 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 Oligo (dT) Magnetic Beads to be hazardous. However, gloves, lab coats and protective eyewear is 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 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.

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.

Material Safety Data Sheet

Trade Name: Oligo (dT) Magnetic Beads

Date of Issue: 4/14/2007

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.

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. Severe 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 Decomposition products: Nature of decomposition products not known.

Material Safety Data Sheet

Trade Name: Oligo (dT) Magnetic Beads

Date of Issue: 4/14/2007

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 the sink with water. Make sure to 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: RNA-Solv Reagent II

Date of Issue: 02/05/2006

1. Product and manufacturer information

Product Information:

Trade Name: RNA-Solv Reagent II
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 Thiocyanate.
Hazardous Components: 593-84-0 Guanidine Thiocyanate (20-50%)

3. Hazardous Identification:

Combustible, Flammable, R 10-20/21/22-32. Harmful if swallowed, inhaled or in contact with skin.

Classification System: The classification was made according to the latest editions of international substances list, and expanded upon from company and literature data.

NFPA Ratings: (Scale: 0-4) Health = 2; Fire = 0; Reactivity = 0

WHMIS Ratings: (Scale: 0-4) Health = 2; 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. Give artificial respiration if not breathing and call emergency services. Oxygen may be required if respiration is difficult.
If swallowed: Wash out mouth with water only if conscious. Call a physician 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.

Material Safety Data Sheet

Trade Name: RNA-Solv Reagent II

Date of Issue: 02/05/2006

6. Accidental Release Measures:

Precautionary Measures: Shut off all sources of ignition and evacuate area. 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:	characteristic	
pH:	(25°C)	7.0
Viscosity:	(25°C)	N/A
Melting Point:		N/A
Boiling Point:		100°C
Ignition Temp:		N/A
Flashpoint:		>60°C
Explosion Level:	Lower:	N/A
	Upper:	N/A
Vapor Pressure:	(25°C)	N/A
Specific Gravity:	(25°C)	1.170 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: Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides,

Hydrogen Sulfide and hydrogen cyanide.

Material Safety Data Sheet

Trade Name: RNA-Solv Reagent II

Date of Issue: 02/05/2006

11. Toxicological Data:

Toxicity Data	IPR-MUS LD50: 300 mg/kg NTIS AD277-6999
Acute Effects of:	N/A
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:	Exposure to skin causes dermatitis
Chronic Effects:	N/A
RTECS Numbers:	XL12250000
Additional Information:	Contact with acids liberates very toxic gas. 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:

Contact either the authorities in charge of approved waste disposal companies which will advise you on how to dispose of special waste. Contaminated packing 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

N/A

15. Regulatory Data:

Labeling: Xn, harmful, flammable, R 20/21/22-32,

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.