

Product Information Revision Date: 06-18-2021 Version: 1.0

Product Name: Auto-Mag® Plasmid DNA Miniprep Kit

Intended Use for the Product:

Use of the substance/mixture: Research Use Only

Name, Address, and Telephone of the Responsible Party

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email Support@amdbiotech.com

Emergency telephone number

Emergency number: In case of medical emergency, call 911. Contact your local Poison Control Center.

List of Components

- Auto-Mag[®] D-1 Particle •
- Solution 1
- Solution 2
- Neutralization Buffer •
- **DNA Elution Buffer** •
- RNase A •

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING

Identification of the substance or mixture

Product Name: Product Family: Recommended Use: Auto-Mag[®] D-1 Particles DNA/RNA purification For laboratory research purposes only

Manufacturer/Supplier

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email <u>Support@amdbiotech.com</u>

Emergency Telephone

If Medical Emergency, Call 911 Contact your local Poison Control Center.

SECTION 2. HAZAEDS IDENTIFICATION

| GHS Classification GHS Symbol Elements Signal word | Not a dangerous substance according to GHS n/a n/a |
|--|---|
| Hazard statement(s) | No data available |
| Precautionary statement(s) | No data available |
| Other hazards | No data available |
| HMIS Classification (0-4) | |
| Health hazard: | 0 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFPA Rating (0-4) | |
| Health hazard: | 0 |
| Fire: | 0 |
| Reactivity Hazard: | 0 |
| Potential Health Effects | No data available |

SETCTION 3. COMPOSITION/IFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

| Chemical Name | CAS No. | Concentration | Other Identifiers |
|---------------|---------|---------------|-------------------|
| n/a | n/a | n/a | n/a |

Full text of H-phrases: see section 16

SETION 4. FIRST-AID MEASURES

General Advice

Exit to a safe area. Consult a physician. Seek medical attention. **If Inhalation** Move to fresh air. If not breathing, give artificial respiration. Consult a physician **In Case of Skin Contact**

Exit to safe area. Wash thoroughly with soap and water. Seek medical attention.

Auto-Mag[®] Plasmid DNA Miniprep Kit

Material Safety Data Sheet

In Case of Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

If swallowed

Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SETION 5. FIRE-FIGHTING MEASURES

Conditions of flammabilityNot flammable or combustibleSuitable Extinguishing MediaDry powder, CO2, water spray, or regular foam.Special Protective Equipment and Precautions for Fire-fightersWear self-contained breathing apparatus for firefighting if necessary.Hazardous combustion productsNo data available

SETION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Soak up inert absorbent material and dispose of it as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SETION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.

SETION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Contains no substances with occupational exposure limit values.

Individual Protection

Hand Protection:

Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.

Eye/Face Protection:

Use a face shield and/or safety googles when handling this product. Use eye ware that has been approved by NIOSH.

Skin Protection:

Wear appropriate laboratory attire when handling this product such as gloves, long pants, closed-toe shoes, and laboratory coat

Respiratory Protection:

In case of insufficient ventilation wear suitable respiratory equipment. Use respirators that have been approved by NIOSH.

Hygiene Measures

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Avoid contact with eyes, skin, and clothing. Wash your hands thoroughly after using this product.

SETION 9. PHYSCAIL AND CHIMECAL PROTECTION

Basic Physical and Chemical Properties

| Appearance | liquid. |
|---|-------------------------------|
| Odor | Odorless |
| Color | Clear, with brown precipitate |
| PH | 6-8 |
| Melting Point/Freezing Point | No data available |
| Initial Boiling Point/Range | No data available |
| Evaporation Rate | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper/Lower Explosive Limit | No data available |
| Vapor Pressure | No data available |
| Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | No data available |
| Solubility | No data available |
| Partition Coefficient, | No data available |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity No data available (kinematic) | No data available |

SETION 10. STABLITY AND REACTIVITY

| Reactivity | Not reactive under normal conditions of use | |
|--|---|--|
| Chemical Stability | | |
| Stable under recommended storage conditions. | | |
| Possibility of Hazardous Reactions | No data available | |
| Conditions to Avoid | No data available | |
| Incompatible Materials | No data available | |
| Hazardous Decomposition Products | No data available | |

SETION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure Skin contact; eye contact; ingestion; inhalation. Acute Toxicity LC50: No information was located. LD50 (oral): No information was located. LD50 (dermal): No information was located. Skin Corrosion/Irritation No information was located. Skin Corrosion/Irritation Eyes Respiratory or Skin Sensitization

Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.

| Germ Cell Mutagenicity | No information was located. | |
|---|-----------------------------|--|
| STOT (Specific Target Organ Toxicity) - Single Exposure | | |
| Inhalation: | No information was located. | |
| Skin Absorption: | No information was located. | |
| Ingestion: | No information was located. | |
| Aspiration Hazard | No information was located. | |

Auto-Mag[®] Plasmid DNA Miniprep Kit

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. **Reproductive Toxicity** No information was located. Sexual Function and Fertility. No information was located. Interactive Effects No information was located. Synergistic Effects No information was located. **Potential Health Effects** Inhalation: Toxic if inhaled. May cause respiratory irritation. Ingestion; Harmful if swallowed. Skin: Harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation. Additional Information No information was located. SETION 12. ECOLOGICAL INFORMATION

| Toxicity | No data available |
|-----------------------------------|-------------------|
| Persistence and Degradability | No data available |
| Bio-accumulative Potential | No data available |
| Mobility in Soil | No data available |
| Other Adverse Effects | No data available |
| Harmful to aquatic life. | |

SETION 13. DISPOSAL CONSIDERATIONS

Product: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Contaminated Packaging:

Disposal must be made according to official regulations.

SETION 14. TRANSPORT INFORMATION

DOT (US)Not considered dangerous goods.IMDGNot considered dangerous goods.IATANot considered dangerous goods.

SETION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this product are required to be reported according to SARA Title III, Section 302.

SARA 313 Components

This product does not contain any chemicals with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Auto-Mag[®] Plasmid DNA Miniprep Kit Material Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

| Right to Know Components | Components | CAS No. | |
|---|------------|-----------|--|
| Massachusetts | Water | 7732-18-5 | |
| Pennsylvania | Water | 7732-18-5 | |
| New Jersey | Water | 7732-18-5 | |
| California Prop. 65 Components | | | |
| This product does not contain any chemicals listed by the State of California's Proposition 65. | | | |

SETION 16. OTHER INFORMATION

GHS Full Text Phrases n/a

AMD Biotech Inc. does not make any representations, guaranties, or warranties as to the accuracy of the information provided and is intended only to describe the product for the purposes of health, safety, and environmental requirements. It is expressly understood and agreed that AMD Biotech Inc. shall in no way be deemed or held to be obligated, liable, or accountable upon or under any guaranties or warranties, express or implied, statutory, by operation of law, or otherwise, in any manner or form, including any implied warranty of merchantability or fitness for a particular purpose, that in any way relates to or arises out of the information provided in this Safety Data Sheet.

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING

Identification of the substance or mixture

Product Name: Product Family: Recommended Use: Solution 1 DNA/RNA purification For laboratory research purposes only

Manufacturer/Supplier

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email <u>Support@amdbiotech.com</u>

Emergency Telephone

If Medical Emergency, Call 911 Contact your local Poison Control Center.

SECTION 2. HAZAEDS IDENTIFICATION

| GHS Classification GHS Symbol Elements Signal word | Not a dangerous substance according to GHS n/a n/a |
|--|---|
| Hazard statement(s) | No data available |
| Precautionary statement(s) | No data available |
| Other hazards | No data available |
| HMIS Classification (0-4) | |
| Health hazard: | 0 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFPA Rating (0-4) | |
| Health hazard: | 0 |
| Fire: | 0 |
| Reactivity Hazard: | 0 |
| Potential Health Effects | No data available |

SETCTION 3. COMPOSITION/IFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

| Chemical Name | CAS No. | Concentration | Other Identifiers |
|---------------|---------|---------------|-------------------|
| n/a | n/a | n/a | n/a |

Full text of H-phrases: see section 16

SETION 4. FIRST-AID MEASURES

General Advice Exit to a safe area. Consult a physician. Seek medical attention. If Inhalation Move to fresh air. If not breathing, give artificial respiration. Consult a physician In Case of Skin Contact

Auto-Mag[®] Plasmid DNA Miniprep Kit

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Material Safety Data Sheet

Exit to safe area. Wash thoroughly with soap and water. Seek medical attention.

In Case of Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

If swallowed

Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SETION 5. FIRE-FIGHTING MEASURES

Conditions of flammabilityNot flammable or combustibleSuitable Extinguishing MediaDry powder, CO2, water spray, or regular foam.Special Protective Equipment and Precautions for Fire-fightersWear self-contained breathing apparatus for firefighting if necessary.Hazardous combustion productsNo data available

SETION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Soak up inert absorbent material and dispose of it as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SETION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.

SETION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Contains no substances with occupational exposure limit values.

Individual Protection

Hand Protection:

Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.

Eye/Face Protection:

Use a face shield and/or safety googles when handling this product. Use eye ware that has been approved by NIOSH.

Skin Protection:

Wear appropriate laboratory attire when handling this product such as gloves, long pants, closed-toe shoes, and laboratory coat

Respiratory Protection:

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According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Material Safety Data Sheet

In case of insufficient ventilation wear suitable respiratory equipment. Use respirators that have been approved by NIOSH.

Hygiene Measures

Avoid contact with eyes, skin, and clothing. Wash your hands thoroughly after using this product.

SETION 9. PHYSCAIL AND CHIMECAL PROTECTION

Basic Physical and Chemical Properties

| Appearance | liquid. |
|---|-------------------|
| Odor | Odorless |
| Color | Colorless |
| PH | 6-8 |
| Melting Point/Freezing Point | No data available |
| Initial Boiling Point/Range | No data available |
| Evaporation Rate | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper/Lower Explosive Limit | No data available |
| Vapor Pressure | No data available |
| Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | No data available |
| Solubility | No data available |
| Partition Coefficient, | No data available |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity No data available (kinematic) | No data available |

SETION 10. STABLITY AND REACTIVITY

ReactivityNot reactive under normal conditions of useChemical StabilityNot reactive under normal conditions of useStable under recommended storage conditions.No data availablePossibility of Hazardous ReactionsNo data availableConditions to AvoidNo data availableIncompatible MaterialsNo data available

SETION 11. TOXICOLOGICAL INFORMATION

Hazardous Decomposition Products

Likely Routes of Exposure Skin contact; eye contact; ingestion; inhalation. **Acute Toxicity** No information was located. LC50: LD50 (oral): No information was located. LD50 (dermal): No information was located. Skin Corrosion/Irritation No information was located. Serious Eye Damage/Eye Irritation Eyes No information was located. **Respiratory or Skin Sensitization** Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes. Germ Cell Mutagenicity No information was located.

No data available

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Material Safety Data Sheet _____

| STOT (Specific Target Organ Toxicity) - Single Exposure | | |
|--|---|--|
| Inhalation: | No information was located. | |
| Skin Absorption: | No information was located. | |
| Ingestion: | No information was located. | |
| Aspiration Hazard | No information was located. | |
| Carcinogenicity | | |
| IARC: No component of this product pres | ent at levels greater than or equal to 0.1% is identified as probable, | |
| possible, or confirmed human carcinogen | by IARC. | |
| ACGIH: No component of this product pre | esent at levels greater than or equal to 0.1% is identified as a carcinogen | |
| or potential carcinogen by ACGIH. | | |
| NTP: No component of this product prese | ent at levels greater than or equal to 0.1% is identified as a known or | |
| anticipated carcinogen by NTP. | | |
| OSHA: No component of this product pre | sent at levels greater than or equal to 0.1% is identified as a carcinogen or | |
| potential carcinogen by OSHA. | | |
| Reproductive Toxicity | No information was located. | |
| Sexual Function and Fertility. | No information was located. | |
| Interactive Effects | No information was located. | |
| Synergistic Effects | No information was located. | |
| Potential Health Effects | | |
| Inhalation: Toxic if inhaled. May cause respiratory irritation. | | |
| Ingestion; Harmful if swallowed. | | |
| Skin: Harmful if absorbed through skin. May cause skin irritation. | | |
| Eyes: May cause eye irritation. | | |
| Additional Information | No information was located. | |
| | | |
| SETION 12. ECOLOGICAL INFORMATION | | |
| Toxicity | No data available | |
| Persistence and Degradability | No data available | |
| Bio-accumulative Potential | No data available | |
| | | |

SETION 13. DISPOSAL CONSIDERATIONS

Product: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

No data available No data available

Contaminated Packaging:

Disposal must be made according to official regulations.

SETION 14. TRANSPORT INFORMATION

| DOT (US) | Not considered dangerous goods. |
|----------|---------------------------------|
| IMDG | Not considered dangerous goods. |
| ΙΑΤΑ | Not considered dangerous goods. |

SETION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this product are required to be reported according to SARA Title III, Section 302.

Auto-Mag[®] Plasmid DNA Miniprep Kit Material Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SARA 313 Components

This product does not contain any chemicals with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

| Right to Know Components | Components | CAS No. | |
|---|------------|-----------|--|
| Massachusetts | Water | 7732-18-5 | |
| Pennsylvania Water 7732-18-5 | | | |
| New Jersey Water 7732-18-5 | | | |
| California Prop. 65 Components | | | |
| This product does not contain any chemicals listed by the State of California's Proposition 65. | | | |

SETION 16. OTHER INFORMATION

GHS Full Text Phrases

n/a

AMD Biotech Inc. does not make any representations, guaranties, or warranties as to the accuracy of the information provided and is intended only to describe the product for the purposes of health, safety, and environmental requirements. It is expressly understood and agreed that AMD Biotech Inc. shall in no way be deemed or held to be obligated, liable, or accountable upon or under any guaranties or warranties, express or implied, statutory, by operation of law, or otherwise, in any manner or form, including any implied warranty of merchantability or fitness for a particular purpose, that in any way relates to or arises out of the information provided in this Safety Data Sheet.

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING

Identification of the substance or mixture

Product Name: Product Family: Recommended Use: Solution 2 DNA/RNA purification For laboratory research purposes only

Manufacturer/Supplier

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email <u>Support@amdbiotech.com</u>

Emergency Telephone

If Medical Emergency, Call 911 Contact your local Poison Control Center.

SECTION 2. HAZAEDS IDENTIFICATION

GHS Classification

Acute toxicity, Oral (Category 4) Acute toxicity, Inhalation (Category 3) Skin irritation (Category 2) Eye irritation (Category 2A GHS Symbol Elements



Signal word Hazard statement(s) H290 H315 H319 Danger

Causes severe skin burns and eye damage Causes skin irritation. Causes serious eye irritation.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P311 Call a POISON CENTER or doctor/ physician

| HMIS Classification (0-4) | |
|---------------------------|-------------------|
| Health hazard: | 2 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFPA Rating (0-4) | |
| Health hazard: | 2 |
| Fire: | 0 |
| Reactivity Hazard: | 0 |
| Other hazards | No data available |

SETCTION 3. COMPOSITION/IFORMATION ON INGREDIENTS

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Mixture of the substances listed below with nonhazardous additions.

| Chemical Name | CAS No. | Concentration | Other Identifiers |
|------------------|---------------|---------------|----------------------|
| Sodium Hydroxide | 1310 - 73 - 2 | 0.5 - 2% | Skin Corr. 1A; H 314 |

Refer to Section 16 for full text of H-Statements and R-Phrases.

SETION 4. FIRST-AID MEASURES

General Advice

Exit to a safe area. Consult a physician. Seek medical attention. **If Inhalation** Move to fresh air. If not breathing, give artificial respiration. Consult a physician **In Case of Skin Contact** Exit to safe area. Wash thoroughly with soap and water. Seek medical attention. **In Case of Eye Contact** Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. **If swallowed** Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SETION 5. FIRE-FIGHTING MEASURES

Conditions of flammability

Not flammable or combustible **Suitable Extinguishing Media** Dry powder, CO2, water spray, or regular foam. **Special Protective Equipment and Precautions for Fire-fighters** Wear self-contained breathing apparatus for firefighting if necessary. **Hazardous combustion products** Carbon oxides (CO, CO2), Sulfur Oxides (SOX), Nitrogen oxides (NOx).

SETION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SETION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.

SETION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Control Parameters

| Components | CAS-No | Value | Control | Basis |
|--|-----------|-------|-------------------|---------------------------------------|
| | | | Parameters | |
| Sodium Hydroxide | 1310-72-2 | CEIL | 2mg/m^3 | USA, ACGIH Threshold Limit Values |
| | | С | 2mg/m^3 | USA OSHA TABLE Z-1Linits for Air |
| | | | | Contaminants- 1910.1000 |
| | | TWA | 2mg/m^3 | USA. Occupational Exposure |
| | | | | Limit1Linits for Air Contaminants |
| | | С | 2mg/m^3 | USA. ACGIH Threshold Limit Values |
| Remarks Eye, Skin & Respiratory Tract Irritation | | | | |
| | | С | | USA.NIOSH Recommended Exposure Limits |

Individual Protection

Hand Protection:

Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.

Eye/Face Protection:

Use a face shield and/or safety googles when handling this product. Use eye ware that has been approved by NIOSH.

Skin Protection:

Wear appropriate laboratory attire when handling this product such as gloves, long pants, closed-toe shoes, and laboratory coat

Respiratory Protection:

In case of insufficient ventilation wear suitable respiratory equipment. Use respirators that have been approved by NIOSH.

Hygiene Measures

Avoid contact with eyes, skin, and clothing. Wash your hands thoroughly after using this product.

SETION 9. PHYSCAIL AND CHIMECAL PROTECTION

Basic Physical and Chemical Properties

| Appearance | liquid. |
|---|-------------------|
| Odor | Odorless |
| Color | Colorless |
| PH | >12 |
| Melting Point/Freezing Point | No data available |
| Initial Boiling Point/Range | No data available |
| Evaporation Rate | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper/Lower Explosive Limit | No data available |
| Vapor Pressure | No data available |
| Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | No data available |
| Solubility | No data available |
| Partition Coefficient, | No data available |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity No data available (kinematic) | No data available |

SETION 10. STABLITY AND REACTIVITY

Auto-Mag[®] Plasmid DNA Miniprep Kit

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Material Safety Data Sheet

Reactivity

Not reactive under normal conditions of use

Chemical Stability Stable under recommended storage conditions. **Possibility of Hazardous Reactions** No data available **Conditions to Avoid** Heating **Incompatible Materials** Strong acids, strong oxidizing agents, cyanides **Hazardous Decomposition Products** Carbon oxides, Nitrogen oxides (NOx), hydrogen chloride gas.

SETION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion; inhalation.

Acute Toxicity

| LC50: | No information was located. |
|--|-----------------------------|
| LD50 (oral): | $500\ 100\%$ mg/kg (rat) |
| LD50 (dermal): | 1350 mg/kg |
| Skin Corrosion/Irritation | No information was located. |
| Serious Eye Damage/Eye Irritation Eyes | No information was located. |

Respiratory or Skin Sensitization

Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.

| Germ Cell Mutagenicity | No information was located. | |
|---|-----------------------------|--|
| STOT (Specific Target Organ Toxicity) - Single Exposure | | |
| Inhalation: | No information was located. | |
| Skin Absorption: | No information was located. | |
| Ingestion: | No information was located. | |
| Aspiration Hazard | No information was located. | |

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

| Reproductive Toxicity | No information was located. |
|---|-------------------------------|
| Sexual Function and Fertility. | No information was located. |
| Interactive Effects | No information was located. |
| Synergistic Effects | No information was located. |
| Potential Health Effects | |
| Inhalation: Toxic if inhaled. May cause | e respiratory irritation. |
| Ingestion; Harmful if swallowed. | |
| Skin: Harmful if absorbed through skin | n. May cause skin irritation. |
| Eyes: May cause eye irritation. | |
| Additional Information | No information was located. |

SETION 12. ECOLOGICAL INFORMATION

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Toxicity

| Persistence and Degradability |
|-----------------------------------|
| Bio-accumulative Potential |
| Mobility in Soil |
| Other Adverse Effects |
| Harmful to aquatic life. |

No data available No data available No data available No data available No data available

SETION 13. DISPOSAL CONSIDERATIONS

Product:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging:

Disposal must be made according to official regulations.

SETION 14. TRANSPORT INFORMATION

| DOT (US) | Not considered dangerous goods. |
|----------|---------------------------------|
| IMDG | Not considered dangerous goods. |
| ΙΑΤΑ | Not considered dangerous goods. |

SETION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this product are required to be reported according to SARA Title III, Section 302.

SARA 313 Components

This product does not contain any chemicals with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

| Right to Know Components | Components | CAS No. |
|--------------------------------|------------|-----------|
| Massachusetts | Water | 7732-18-5 |
| Pennsylvania | Water | 7732-18-5 |
| New Jersey | Water | 7732-18-5 |
| California Bran, CE Components | | |

California Prop. 65 Components

This product does not contain any chemicals listed by the State of California's Proposition 65.

SETION 16. OTHER INFORMATION

GHS Full Text Phrases

| Acute Tox. | Acute Toxicity |
|------------|--|
| H314 | Causes severe skin burns and eye damage. |
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |

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According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING

Identification of the substance or mixture

Product Name: Product Family: Recommended Use: Neutralization Buffer DNA/RNA purification For laboratory research purposes only

Manufacturer/Supplier

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email <u>Support@amdbiotech.com</u>

Emergency Telephone

If Medical Emergency, Call 911 Contact your local Poison Control Center.

SECTION 2. HAZAEDS IDENTIFICATION

GHS Classification

Acute toxicity, Oral (Category 4) Acute toxicity, Inhalation (Category 3) Skin irritation (Category 2) Eye irritation (Category 2A **GHS Symbol Elements**



| Signal word | Danger |
|---|---|
| Hazard statement(s) | |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled |
| Precautionary statement(s) | |
| P261 Avoid breathing dust/ fume/ gas/ mis | st/ vapors/ spray |
| P305+P351+P338 IF IN EYES: Rinse cautiou | sly with water for several minutes. Remove contact lenses, if present |
| and easy to do. Continue rinsing | |
| P311 Call a POISON CENTER or doctor/ ph | nysician |
| HMIS Classification (0-4) | |
| Health hazard: | 2 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFPA Rating (0-4) | |
| Health hazard: | 2 |
| Fire: | 0 |
| Reactivity Hazard: | 0 |
| Other hazards | No data available |

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SETCTION 3. COMPOSITION/IFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

| Chemical Name | CAS No. | Concentration | Other Identifiers |
|-------------------------|---------|---------------|-------------------|
| Guanidine Hydrochloride | 50-01-1 | 50-100% | n/a |

Refer to Section 16 for full text of H-Statements and R-Phrases.

SETION 4. FIRST-AID MEASURES

General Advice

Exit to a safe area. Consult a physician. Seek medical attention.

If Inhalation

Move to fresh air. If not breathing, give artificial respiration. Consult a physician

In Case of Skin Contact

Exit to safe area. Wash thoroughly with soap and water. Seek medical attention.

In Case of Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

If swallowed

Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SETION 5. FIRE-FIGHTING MEASURES

Conditions of flammability

Not flammable or combustible **Suitable Extinguishing Media** Dry powder, CO2, water spray, or regular foam. **Special Protective Equipment and Precautions for Fire-fighters** Wear self-contained breathing apparatus for firefighting if necessary. **Hazardous combustion products** Carbon oxides (CO, CO2), Sulfur Oxides (SOX), Nitrogen oxides (NOx).

SETION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SETION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.

SETION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Auto-Mag[®] Plasmid DNA Miniprep Kit

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Material Safety Data Sheet

Control Parameters

Contains no substances with occupational exposure limit values.

Individual Protection

Hand Protection:

Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.

Eye/Face Protection:

Use a face shield and/or safety googles when handling this product. Use eye ware that has been approved by NIOSH.

Skin Protection:

Wear appropriate laboratory attire when handling this product such as gloves, long pants, closed-toe shoes, and laboratory coat

Respiratory Protection:

In case of insufficient ventilation wear suitable respiratory equipment. Use respirators that have been approved by NIOSH.

Hygiene Measures

Avoid contact with eyes, skin, and clothing. Wash your hands thoroughly after using this product.

SETION 9. PHYSCAIL AND CHIMECAL PROTECTION

Basic Physical and Chemical Properties

| Appearance | liquid. |
|---|-------------------|
| Odor | Odorless |
| Color | Colorless |
| РН | <5 |
| Melting Point/Freezing Point | No data available |
| Initial Boiling Point/Range | No data available |
| Evaporation Rate | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper/Lower Explosive Limit | No data available |
| Vapor Pressure | No data available |
| Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | No data available |
| Solubility | No data available |
| Partition Coefficient, | No data available |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity No data available (kinematic) | No data available |
| | |

SETION 10. STABLITY AND REACTIVITY

| Reactivity | Not reactive under normal conditions of use |
|---|---|
| Chemical Stability | |
| Stable under recommended storage condi | tions. |
| Possibility of Hazardous Reactions | No data available |
| Conditions to Avoid | |
| Heating | |
| Incompatible Materials | |
| Strong acids, strong oxidizing agents, cyan | ides |
| Hazardous Decomposition Products | |

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Carbon oxides, Nitrogen oxides (NOx), hydrogen chloride gas.

SETION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Skin contact; eye contact; ingestion; inhalation.

| Acute Toxicity | |
|--|-----------------------------|
| LC50: | No information was located. |
| LD50 (oral): | No information was located. |
| LD50 (dermal): | No information was located. |
| Skin Corrosion/Irritation | No information was located. |
| Serious Eye Damage/Eye Irritation Eyes | No information was located. |
| Respiratory or Skin Sensitization | |

Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.

Germ Cell Mutagenicity No information was located.

STOT (Specific Target Organ Toxicity) - Single Exposure

| Inhalation: | No information was located. |
|-------------------|-----------------------------|
| Skin Absorption: | No information was located. |
| Ingestion: | No information was located. |
| Aspiration Hazard | No information was located. |

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

| Reproductive Toxicity | No information was located. |
|---|-----------------------------|
| Sexual Function and Fertility. | No information was located. |
| Interactive Effects | No information was located. |
| Synergistic Effects | No information was located. |
| Potential Health Effects | |
| Inhalation: Toxic if inhaled. May cause res | piratory irritation. |
| Ingestion; Harmful if swallowed. | |
| Skin: Harmful if absorbed through skin. M | ay cause skin irritation. |
| Eyes: May cause eye irritation. | |
| Additional Information | No information was located. |
| | |

SETION 12. ECOLOGICAL INFORMATION

| Toxicity | No data available |
|-------------------------------|-------------------|
| Persistence and Degradability | No data available |
| Bio-accumulative Potential | No data available |
| Mobility in Soil | No data available |
| Other Adverse Effects | No data available |
| Harmful to aquatic life. | |

SETION 13. DISPOSAL CONSIDERATIONS

Product: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Contaminated Packaging:

Disposal must be made according to official regulations.

SETION 14. TRANSPORT INFORMATION

| DOT (US) | Not considered dangerous goods. |
|----------|---------------------------------|
| IMDG | Not considered dangerous goods. |
| ΙΑΤΑ | Not considered dangerous goods. |

SETION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this product are required to be reported according to SARA Title III, Section 302.

SARA 313 Components

This product does not contain any chemicals with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

| Right to Know Components | Components | CAS No. |
|--------------------------------|-------------------------|-----------|
| Massachusetts | Water | 7732-18-5 |
| Pennsylvania | Water | 7732-18-5 |
| | Guanidine Hydrochloride | 50-01-1 |
| New Jersey | Water | 7732-18-5 |
| | Guanidine Hydrochloride | 50-01-1 |
| California Prop. 65 Components | | |

This product does not contain any chemicals listed by the State of California's Proposition 65.

SETION 16. OTHER INFORMATION

GHS Full Text Phrases

| Acute Tox. | Acute Toxicity |
|------------|-------------------------------|
| Eye Irri | Eye Irritation |
| H302 | Harmful if swallowed |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| Skin Irri | Skin Irritation |

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According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING

Identification of the substance or mixture

Product Name: Product Family: Recommended Use: DNA Elution Buffer DNA/RNA purification For laboratory research purposes only

Manufacturer/Supplier

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email <u>Support@amdbiotech.com</u>

Emergency Telephone

If Medical Emergency, Call 911 Contact your local Poison Control Center.

SECTION 2. HAZAEDS IDENTIFICATION

| GHS Classification | Not a dangerous substance according to GHS |
|----------------------------|--|
| GHS Symbol Elements | n/a |
| Signal word | n/a |
| Hazard statement(s) | No data available |
| Precautionary statement(s) | No data available |
| Other hazards | No data available |
| HMIS Classification (0-4) | |
| Health hazard: | 0 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFPA Rating (0-4) | |
| Health hazard: | 0 |
| Fire: | 0 |
| Reactivity Hazard: | 0 |
| Potential Health Effects | No data available |

SETCTION 3. COMPOSITION/IFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

| Chemical Name | CAS No. | Concentration | Other Identifiers |
|---------------|---------|---------------|-------------------|
| n/a | n/a | n/a | n/a |

Full text of H-phrases: see section 16

SETION 4. FIRST-AID MEASURES

General Advice

Exit to a safe area. Consult a physician. Seek medical attention. If Inhalation Move to fresh air. If not breathing, give artificial respiration. Consult a physician In Case of Skin Contact

Material Safety Data Sheet

Exit to safe area. Wash thoroughly with soap and water. Seek medical attention.

In Case of Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

If swallowed

Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SETION 5. FIRE-FIGHTING MEASURES

Conditions of flammabilityNot flammable or combustibleSuitable Extinguishing MediaDry powder, CO2, water spray, or regular foam.Special Protective Equipment and Precautions for Fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary. Hazardous combustion products No data available

SETION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Soak up inert absorbent material and dispose of it as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SETION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.

SETION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Contains no substances with occupational exposure limit values.

Individual Protection

Hand Protection:

Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.

Eye/Face Protection:

Use a face shield and/or safety googles when handling this product. Use eye ware that has been approved by NIOSH.

Skin Protection:

Wear appropriate laboratory attire when handling this product such as gloves, long pants, closed-toe shoes, and laboratory coat

Respiratory Protection:

In case of insufficient ventilation wear suitable respiratory equipment. Use respirators that have been approved by NIOSH.

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Hygiene Measures

Avoid contact with eyes, skin, and clothing. Wash your hands thoroughly after using this product.

SETION 9. PHYSCAIL AND CHIMECAL PROTECTION

Basic Physical and Chemical Properties

| Appearance | liquid. |
|---|-------------------|
| Odor | Odorless |
| Color | Colorless |
| PH | 6-8 |
| Melting Point/Freezing Point | No data available |
| Initial Boiling Point/Range | No data available |
| Evaporation Rate | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper/Lower Explosive Limit | No data available |
| Vapor Pressure | No data available |
| Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | No data available |
| Solubility | No data available |
| Partition Coefficient, | No data available |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity No data available (kinematic) | No data available |

SETION 10. STABLITY AND REACTIVITY

| Reactivity | Not reactive under normal conditions of use | |
|--------------------------------------|---|--|
| Chemical Stability | | |
| Stable under recommended storage con | ditions. | |
| Possibility of Hazardous Reactions | No data available | |
| Conditions to Avoid | No data available | |
| Incompatible Materials | No data available | |
| Hazardous Decomposition Products | No data available | |

SETION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

| Skin contact; eye contact; ingestion; inhala | ation. |
|--|---|
| Acute Toxicity | |
| LC50: | No information was located. |
| LD50 (oral): | No information was located. |
| LD50 (dermal): | No information was located. |
| Skin Corrosion/Irritation | No information was located. |
| Serious Eye Damage/Eye Irritation Eyes | No information was located. |
| Respiratory or Skin Sensitization | |
| Components of the product may be absor | bed into the body through the skin. Irritating to skin and mucous |
| membranes. | |
| Germ Cell Mutagenicity | No information was located. |
| STOT (Specific Target Organ Toxicity) - Sir | ngle Exposure |
| Inhalation: | No information was located |

| of of (openine ranger of gain rement), | embre Experie |
|--|-----------------------------|
| Inhalation: | No information was located. |
| Skin Absorption: | No information was located. |
| Ingestion: | No information was located. |

Aspiration Hazard

Carcinogenicity

Auto-Mag[®] Plasmid DNA Miniprep Kit

Material Safety Data Sheet

_____ No information was located. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

| Reproductive Toxicity | No information was located. |
|--------------------------------|-----------------------------|
| Sexual Function and Fertility. | No information was located. |
| Interactive Effects | No information was located. |
| Synergistic Effects | No information was located. |
| Potential Health Effects | |

Inhalation: Toxic if inhaled. May cause respiratory irritation.

Ingestion; Harmful if swallowed.

Skin: Harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. Additional Information

No information was located.

SETION 12. ECOLOGICAL INFORMATION

| Toxicity | No data available |
|-----------------------------------|-------------------|
| Persistence and Degradability | No data available |
| Bio-accumulative Potential | No data available |
| Mobility in Soil | No data available |
| Other Adverse Effects | No data available |
| Harmful to aquatic life. | |

SETION 13. DISPOSAL CONSIDERATIONS

Product: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Contaminated Packaging:

Disposal must be made according to official regulations.

SETION 14. TRANSPORT INFORMATION

DOT (US) Not considered dangerous goods. IMDG Not considered dangerous goods. ΙΑΤΑ Not considered dangerous goods.

SETION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this product are required to be reported according to SARA Title III, Section 302.

SARA 313 Components

This product does not contain any chemicals with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Auto-Mag[®] Plasmid DNA Miniprep Kit Material Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

Right to Know ComponentsComponentsCAS No.MassachusettsWater7732-18-5PennsylvaniaWater7732-18-5New JerseyWater7732-18-5California Prop. 65 ComponentsVater

This product does not contain any chemicals listed by the State of California's Proposition 65.

SETION 16. OTHER INFORMATION

GHS Full Text Phrases n/a

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According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING

Identification of the substance or mixture

Product Name: Product Family: Recommended Use: RNase A DNA/RNA purification For laboratory research purposes only

Manufacturer/Supplier

AMD Biotech Inc. 1860 Montreal Rd. Tucker, GA 30084 USA. Telephone 404-290-5063 Email <u>Support@amdbiotech.com</u>

Emergency Telephone

If Medical Emergency, Call 911 Contact your local Poison Control Center.

SECTION 2. HAZAEDS IDENTIFICATION

| GHS Classification | 1 |
|--|--|
| Respiratory Sensitization | 1 |
| GHS Symbol Elements | n/a |
| Signal word | |
| Warning | |
| Hazard statement(s) | |
| H316 Causes mild skin irritation | |
| H320 Causes eye irritation. | |
| Precautionary statement(s) | |
| | ously with water for several minutes. Remove contact lenses if present |
| and easy to do. Continue rinsing | |
| Other hazards | No data available |
| HMIS Classification (0-4) | |
| Health hazard: | 0 |
| Flammability: | 0 |
| Physical hazards: | 0 |
| NFPA Rating (0-4) | |
| Health hazard: | 0 |
| Fire: | 0 |
| Reactivity Hazard: | 0 |
| Potential Health Effects | |
| Inhalation: May cause respiratory tract irri | tation |
| Skin: May be harmful if absorbed through | skin. Causes skin irritation. |
| Eyes: Causes eye irritation. | |
| Ingestion: May be harmful if swallowed. | |
| | |

SETCTION 3. COMPOSITION/IFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

| Chemical Name CAS No. Concentration Other Identifiers | 5 |
|---|---|
|---|---|

RNase A

Auto-Mag[®] Plasmid DNA Miniprep Kit Material Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

| Ribonuclease A | 9001-99-4 | 5-10mg/ml | n/a |
|----------------|-----------|-----------|-----|
| Glycerol | 56-81-5 | 30-50 % | n/a |
| | | | |

Refer to Section 16 for full text of H-Statements and R-Phrases

SETION 4. FIRST-AID MEASURES

General Advice

Exit to a safe area. Consult a physician. Seek medical attention.

If Inhalation

Move to fresh air. If not breathing, give artificial respiration. Consult a physician

In Case of Skin Contact

Exit to safe area. Wash thoroughly with soap and water. Seek medical attention.

In Case of Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open.

If swallowed

Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

SETION 5. FIRE-FIGHTING MEASURES

Conditions of flammabilityNot flammable or combustibleSuitable Extinguishing MediaDry powder, CO2, water spray, or regular foam.Special Protective Equipment and Precautions for Fire-fightersWear self-contained breathing apparatus for firefighting if necessary.Hazardous combustion productsNo data available

SETION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Methods and materials for containment and cleaning up

Soak up inert absorbent material and dispose of it as hazardous waste. Keep in suitable, closed containers for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SETION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handle in accordance with good chemical hygiene and safety practices. Protect from moisture. Avoid contact with eyes. Avoid inhalation of vapor or mist.

Conditions for Safe Storage

Keep containers tightly closed in a dry, cool, and well-ventilated place. Protect from moisture.

SETION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Components | CAS-No | Value | Control Parameters | Basis |
|------------|---------|-------|---------------------------|--------------------------------------|
| Glycerol | 56-81-5 | TWA | 10mg/m ³ | USA. OSHA - TABLE Z-1 Limits for Air |

RNase A

Auto-Mag[®] Plasmid DNA Miniprep Kit Material Safety Data Sheet

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

| | | |
|------|------|----------------|
| | | Contaminants - |
| | | 1910.1000 |

Individual Protection

Hand Protection:

Use gloves when handling this product. Inspect gloves prior to use for any visible damage. Use proper glove removal technique to prevent contact with skin. Dispose of gloves in accordance with applicable laws. Wash and dry hands after use.

Eye/Face Protection:

Use a face shield and/or safety googles when handling this product. Use eye ware that has been approved by NIOSH.

Skin Protection:

Wear appropriate laboratory attire when handling this product such as gloves, long pants, closed-toe shoes, and laboratory coat

Respiratory Protection:

In case of insufficient ventilation wear suitable respiratory equipment. Use respirators that have been approved by NIOSH.

Hygiene Measures

Avoid contact with eyes, skin, and clothing. Wash your hands thoroughly after using this product.

SETION 9. PHYSCAIL AND CHIMECAL PROTECTION

Basic Physical and Chemical Properties

| Appearance | liquid. |
|---|-------------------|
| Odor | No data available |
| Color | No data available |
| PH | No data available |
| Melting Point/Freezing Point | No data available |
| Initial Boiling Point/Range | No data available |
| Evaporation Rate | No data available |
| Flash Point | No data available |
| Flammability (solid, gas) | No data available |
| Upper/Lower Explosive Limit | No data available |
| Vapor Pressure | No data available |
| Vapor Density (air = 1) | No data available |
| Relative Density (water = 1) | No data available |
| Solubility | No data available |
| Partition Coefficient, | No data available |
| Auto-ignition Temperature | No data available |
| Decomposition Temperature | No data available |
| Viscosity No data available (kinematic) | No data available |

SETION 10. STABLITY AND REACTIVITY

| Reactivity | Not reactive under normal conditions of use |
|---------------------------------------|---|
| Chemical Stability | |
| Stable under recommended storage cond | itions. |
| Possibility of Hazardous Reactions | No data available |
| Conditions to Avoid | No data available |
| Incompatible Materials | No data available |
| Hazardous Decomposition Products | No data available |

SETION 11. TOXICOLOGICAL INFORMATION

RNase A

Likely Routes of Exposure

Skin contact; eye contact; ingestion; inhalation.

Acute Toxicity

| LC50: | No information was located. |
|--|-----------------------------|
| LD50 (oral): | No information was located. |
| LD50 (dermal): | No information was located. |
| Skin Corrosion/Irritation | No information was located. |
| Serious Eye Damage/Eye Irritation Eyes | No information was located. |
| Respiratory or Skin Sensitization | |

Components of the product may be absorbed into the body through the skin. Irritating to skin and mucous membranes.

| Germ Cell Mutagenicity | No information was located. |
|---|-----------------------------|
| STOT (Specific Target Organ Toxicity) - Sir | igle Exposure |
| Inhalation: | No information was located. |
| Skin Absorption: | No information was located. |
| Ingestion: | No information was located. |
| Aspiration Hazard | No information was located. |

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

| Reproductive Toxicity | No information was located. |
|---|-----------------------------|
| Sexual Function and Fertility. | No information was located. |
| Interactive Effects | No information was located. |
| Synergistic Effects | No information was located. |
| Potential Health Effects | |
| Inhalation: Toxic if inhaled. May cause res | spiratory irritation. |

Ingestion; Harmful if swallowed.

Skin: Harmful if absorbed through skin. May cause skin irritation. Eyes: May cause eye irritation.

Additional Information

No information was located.

SETION 12. ECOLOGICAL INFORMATION

| Toxicity | No data available |
|-----------------------------------|-------------------|
| Persistence and Degradability | No data available |
| Bio-accumulative Potential | No data available |
| Mobility in Soil | No data available |
| Other Adverse Effects | No data available |

SETION 13. DISPOSAL CONSIDERATIONS

Product: Disposal should be in accordance with applicable regional, national, and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

Contaminated Packaging:

Disposal must be made according to official regulations.

According to Federal Register/ Vol. 77, No. 58/ Monday, March 26, 2012/ Rules, and Regulations

SETION 14. TRANSPORT INFORMATION

| DOT (US) | Not considered dangerous goods. |
|----------|---------------------------------|
| IMDG | Not considered dangerous goods. |
| ΙΑΤΑ | Not considered dangerous goods. |

SETION 15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this product are required to be reported according to SARA Title III, Section 302.

SARA 313 Components

This product does not contain any chemicals with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Chronic Health Hazard

| Right to Know Components | Components | CAS No. | |
|----------------------------------|--------------|--------------------------------|--|
| Massachusetts | Glycerol | 56-81-5 | |
| Pennsylvania | Glycerol | 56-81-5 | |
| | Water | 7732-18-5 | |
| New Jersey | Glycerol | 56-81-5 | |
| | Water | 7732-18-5 | |
| | Ribonuclease | 9001-99-4 | |
| California Prop. 65 Components | | • | |
| This product does not contain an | | of California's Droposition CE | |

This product does not contain any chemicals listed by the State of California's Proposition 65.

SETION 16. OTHER INFORMATION

GHS Full Text Phrases

n/a

AMD Biotech Inc. does not make any representations, guaranties, or warranties as to the accuracy of the information provided and is intended only to describe the product for the purposes of health, safety, and environmental requirements. It is expressly understood and agreed that AMD Biotech Inc. shall in no way be deemed or held to be obligated, liable, or accountable upon or under any guaranties or warranties, express or implied, statutory, by operation of law, or otherwise, in any manner or form, including any implied warranty of merchantability or fitness for a particular purpose, that in any way relates to or arises out of the information provided in this Safety Data Sheet.