

<b>Product Information</b>	<b>Revision Date: 06-18-2021</b>	<b>Version: 1.0</b>
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**Product Name:** Auto-Mag® Total RNA Isolation 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](mailto:Support@amdbiotech.com)

**Emergency telephone number**

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

<b>List of Components</b>
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- Auto-Mag® C-5 Particle
- RLB Buffer
- DCE Buffer
- MRW Buffer
- RW2 Buffer
- DNase I Digestion Buffer
- DNase I
- Proteinase K
- RNA Elution Buffer

**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

Product Name: Auto-Mag® C-5 Particles  
Product Family: DNA/RNA purification  
Recommended Use: For laboratory research purposes only

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**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

**SECTION 3. COMPOSITION/INFORMATION 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

**SECTION 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.

**SECTION 5. FIRE-FIGHTING MEASURES****Conditions of flammability**

Not flammable or combustible

**Suitable Extinguishing Media**

Dry powder, CO<sub>2</sub>, 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

**SECTION 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.

**SECTION 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.

**SECTION 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 goggles 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.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 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)

## SECTION 10. STABILITY 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

## SECTION 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 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.

**SECTION 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.

**SECTION 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.

**SECTION 14. TRANSPORT INFORMATION****DOT (US)**

Not considered dangerous goods.

**IMDG**

Not considered dangerous goods.

**IATA**

Not considered dangerous goods.

**SECTION 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

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

**SECTION 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.

**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

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

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**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/ 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

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS No.	Concentration	Other Identifiers
Guanidine Thiocyanate	593-84-0	50-80%	n/a

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

**SECTION 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.

**SECTION 5. FIRE-FIGHTING MEASURES****Conditions of flammability**

Not flammable or combustible

**Suitable Extinguishing Media**

Dry powder, CO<sub>2</sub>, 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, CO<sub>2</sub>), Sulfur Oxides (SOX), Nitrogen oxides (NO<sub>x</sub>).

**SECTION 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.

**SECTION 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.

**SECTION 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 goggles 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.

**SECTION 9. PHYSICAL AND CHEMICAL PROTECTION****Basic Physical and Chemical Properties**

Appearance	liquid.
Odor	Odorless
Color	Colorless
PH	<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)

**SECTION 10. STABILITY 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**

Heating

**Incompatible Materials**

Strong acids, strong oxidizing agents, cyanides

**Hazardous Decomposition Products**

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

## SECTION 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 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.

## SECTION 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.

## SECTION 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.

**SECTION 14. TRANSPORT INFORMATION****DOT (US)**

Not considered dangerous goods.

**IMDG**

Not considered dangerous goods.

**IATA**

Not considered dangerous goods.

**SECTION 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 Guanidine thiocyanate	7732-18-5 593-84-0
New Jersey	Water Guanidine thiocyanate	7732-18-5 593-84-0
<b>California Prop. 65 Components</b>		
This product does not contain any chemicals listed by the State of California's Proposition 65.		

**SECTION 16. OTHER INFORMATION****GHS Full Text Phrases**

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

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.

**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

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

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**Emergency Telephone**

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

**SECTION 2. HAZAEDS IDENTIFICATION**

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

**SECTION 3. COMPOSITION/INFORMATION 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

**SECTION 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**

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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.

**SECTION 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** No data available

**SECTION 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.

**SECTION 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.

**SECTION 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 goggles 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.

**SECTION 9. PHYSICAL AND CHEMICAL 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)

**SECTION 10. STABILITY 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

**SECTION 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 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.

**SECTION 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.

**SECTION 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.

**SECTION 14. TRANSPORT INFORMATION****DOT (US)**

Not considered dangerous goods.

**IMDG**

Not considered dangerous goods.

**IATA**

Not considered dangerous goods.

**SECTION 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

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

**SECTION 16. OTHER INFORMATION****GHS Full Text Phrases**

n/a

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**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

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

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**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/ 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

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS No.	Concentration	Other Identifiers
Guanidine Thiocyanate	593-84-0	10-25%	n/a

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

**SECTION 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.

**SECTION 5. FIRE-FIGHTING MEASURES****Conditions of flammability**

Not flammable or combustible

**Suitable Extinguishing Media**

Dry powder, CO<sub>2</sub>, 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, CO<sub>2</sub>), Sulfur Oxides (SOX), Nitrogen oxides (NO<sub>x</sub>).

**SECTION 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.

**SECTION 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.

**SECTION 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 goggles 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.

**SECTION 9. PHYSICAL AND CHEMICAL PROTECTION****Basic Physical and Chemical Properties**

Appearance	liquid.
Odor	Odorless
Color	Colorless
PH	<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)

**SECTION 10. STABILITY 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**

Heating

**Incompatible Materials**

Strong acids, strong oxidizing agents, cyanides

**Hazardous Decomposition Products**

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

**SECTION 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 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.

**SECTION 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.

**SECTION 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.

**SECTION 14. TRANSPORT INFORMATION****DOT (US)**

Not considered dangerous goods.

**IMDG**

Not considered dangerous goods.

**IATA**

Not considered dangerous goods.

**SECTION 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 Guanidine thiocyanate	7732-18-5 593-84-0
New Jersey	Water Guanidine thiocyanate	7732-18-5 593-84-0
<b>California Prop. 65 Components</b> This product does not contain any chemicals listed by the State of California's Proposition 65.		

**SECTION 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

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.

**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

Product Name: RW2 Buffer  
Product Family: DNA/RNA purification  
Recommended Use: For laboratory research purposes only

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**Emergency Telephone**

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

**SECTION 2. HAZAEDS IDENTIFICATION**

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

**SECTION 3. COMPOSITION/INFORMATION 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

**SECTION 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.

**SECTION 5. FIRE-FIGHTING MEASURES****Conditions of flammability**

Not flammable or combustible

**Suitable Extinguishing Media**

Dry powder, CO<sub>2</sub>, 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

**SECTION 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.

**SECTION 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.

**SECTION 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 goggles 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.

**SECTION 9. PHYSICAL AND CHEMICAL 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)

**SECTION 10. STABILITY 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

**SECTION 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**



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Inhalation:	No information was located.
Skin Absorption:	No information was located.
Ingestion:	No information was located.
<b>Aspiration Hazard</b>	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.

<b>Reproductive Toxicity</b>	No information was located.
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<b>Sexual Function and Fertility.</b>	No information was located.
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<b>Interactive Effects</b>	No information was located.
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<b>Synergistic Effects</b>	No information was located.
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**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.

<b>Additional Information</b>	No information was located.
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**SECTION 12. ECOLOGICAL INFORMATION**

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

**SECTION 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.

**SECTION 14. TRANSPORT INFORMATION**

<b>DOT (US)</b>	Not considered dangerous goods.
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<b>IMDG</b>	Not considered dangerous goods.
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<b>IATA</b>	Not considered dangerous goods.
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**SECTION 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**

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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
<b>California Prop. 65 Components</b>		
This product does not contain any chemicals listed by the State of California's Proposition 65.		

**SECTION 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.

**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

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

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**Emergency Telephone**

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

**SECTION 2. HAZAEDS IDENTIFICATION**

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

**SECTION 3. COMPOSITION/INFORMATION 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

**SECTION 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.

### **SECTION 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** No data available

### **SECTION 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.

### **SECTION 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.

### **SECTION 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 goggles 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.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

##### 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)

#### SECTION 10. STABILITY 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

#### SECTION 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 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.

**SECTION 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.

**SECTION 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.

**SECTION 14. TRANSPORT INFORMATION****DOT (US)**

Not considered dangerous goods.

**IMDG**

Not considered dangerous goods.

**IATA**

Not considered dangerous goods.

**SECTION 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

# DNase I Digestion Buffer

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

Auto-Mag® Total RNA Isolation Kit

## Material Safety Data Sheet

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

### SECTION 16. OTHER INFORMATION

#### GHS Full Text Phrases

n/a

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**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

Product Name: DNase I  
Product Family: DNA/RNA purification  
Recommended Use: For laboratory research purposes only

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**Emergency Telephone**

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

**SECTION 2. HAZAEDS IDENTIFICATION****GHS Classification**

Skin Irritation

Eye Irritation

**GHS Symbol Elements** n/a

**Signal word** n/a

**Hazard statement(s)**

H316 Causes mild skin irritation

H320 Causes eye irritation.

**Precautionary statement(s)**

P305 + P351 + P338 IF IN EYES: Rinse cautiously 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** No data available

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS No.	Concentration	Other Identifiers
Deoxyribonuclease I	9003-98-9	2-100mg/ml	n/a
Glycerol	56-81-5	20-40%	Glycerol

Full text of H-phrases: see section 16



**SECTION 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.

**SECTION 5. FIRE-FIGHTING MEASURES****Conditions of flammability**

Not flammable or combustible

**Suitable Extinguishing Media**

Dry powder, CO<sub>2</sub>, 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

**SECTION 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.

**SECTION 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.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control Parameters**

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

**SECTION 9. PHYSICAL AND CHEMICAL 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)

**SECTION 10. STABILITY 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

**SECTION 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 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.

**SECTION 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.

**SECTION 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.

**SECTION 14. TRANSPORT INFORMATION**

**DOT (US)** Not considered dangerous goods.

IMDG

Not considered dangerous goods.

IATA

Not considered dangerous goods.

**SECTION 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
	Glycerol	56-81-5
Pennsylvania	Water	7732-18-5
	Glycerol	56-81-5
New Jersey	Water	7732-18-5
	Glycerol	56-81-5
<b>California Prop. 65 Components</b>		
This product does not contain any chemicals listed by the State of California's Proposition 65.		

**SECTION 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.

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

#### Identification of the substance or mixture

Product Name: Proteinase K solution  
Product Family: DNA/RNA purification  
Recommended Use: For laboratory research purposes only

#### Manufacturer/Supplier

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

#### Emergency Telephone

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

### SECTION 2. HAZARDS IDENTIFICATION

#### GHS Classification

Skin Irritation	2
Skin Sensitizer	1
Eye Irritation	2
Respiratory Sensitization	1

#### GHS Symbol Elements



#### Signal word

Danger

#### Hazard statement(s)

H317 May cause an allergic skin reaction  
H315 Causes skin irritation  
H319 Causes serious eye irritation  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 May cause respiratory irritation.

#### Precautionary statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face protection  
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  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

**Other hazards** No data available

#### HMIS Classification (0-4)

Health hazard:	2
Flammability:	0
Physical hazards:	0

#### NFPA Rating (0-4)

Health hazard:	2
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# Proteinase K

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Fire: 0

Reactivity Hazard: 0

### Potential Health Effects

Inhalation: May cause respiratory tract irritation

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS No.	Concentration	Other Identifiers
Proteinase K	39450-01-6	10-40mg/ml	n/a
Glycerol	56-81-5	30-50 %	n/a

Full text of H-phrases: see section 16

### SECTION 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.

### SECTION 5. FIRE-FIGHTING MEASURES

Conditions of flammability Not flammable or combustible

#### Suitable Extinguishing Media

Dry powder, CO<sub>2</sub>, 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

### SECTION 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.

### SECTION 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.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control Parameters**

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

**SECTION 9. PHYSICAL AND CHEMICAL PROTECTION****Basic Physical and Chemical Properties**

Appearance	liquid.
Odor	Odorless
Color	Clear/slight yellow
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

**SECTION 10. STABILITY AND REACTIVITY**

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

**SECTION 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 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.

**SECTION 12. ECOLOGICAL INFORMATION****Toxicity**

To Fish



# Proteinase K

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>5,000 mg/L Carassius Auratus (Goldfish)  
44,000 mg/L Pimephales Promelas (Fathead Minnow)  
>100,100 mg/L other fish  
67,500 mg/L Oncorhynchus Mykiss (Rainbow Trout)

**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.

### SECTION 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.

### SECTION 14. TRANSPORT INFORMATION

**DOT (US)** Not considered dangerous goods.  
**IMDG** Not considered dangerous goods.  
**IATA** Not considered dangerous goods.

### SECTION 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	Glycerol Proteinase K	56-81-5 39450-01-6
Pennsylvania	Water Glycerol Proteinase K	7732-18-5 56-81-5 39450-01-6
New Jersey	Water Glycerol Proteinase K	7732-18-5 56-81-5 39450-01-6-5
<b>California Prop. 65 Components</b> This product does not contain any chemicals listed by the State of California's Proposition 65.		

### SECTION 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

# Proteinase K

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

**Auto-Mag® Total RNA Isolation Kit**

**Material Safety Data Sheet**

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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.

**SECTION 1. IDENTIFICATION OF SUBSTANCE MIXTURE, COMPANY, AND UNDERTAKING****Identification of the substance or mixture**

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

**Manufacturer/Supplier**

AMD Biotech Inc.  
1860 Montreal Rd.  
Tucker, GA 30084  
USA.  
Telephone 404-290-5063  
Email [Support@amdbiotech.com](mailto:Support@amdbiotech.com)

**Emergency Telephone**

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

**SECTION 2. HAZARDS IDENTIFICATION**

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

**SECTION 3. COMPOSITION/INFORMATION 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

**SECTION 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.

**SECTION 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** No data available

**SECTION 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.

**SECTION 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.

**SECTION 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 goggles 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.

## SECTION 9. PHYSICAL AND CHEMICAL 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)

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity** Not reactive under normal conditions of use

### Chemical Stability

Stable under recommended storage conditions.

<b>Possibility of Hazardous Reactions</b>	No data available
<b>Conditions to Avoid</b>	No data available
<b>Incompatible Materials</b>	No data available
<b>Hazardous Decomposition Products</b>	No data available

## SECTION 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.
<b>Skin Corrosion/Irritation</b>	No information was located.
<b>Serious Eye Damage/Eye Irritation Eyes</b>	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 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.

## SECTION 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.

## SECTION 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.

## SECTION 14. TRANSPORT INFORMATION

### DOT (US)

Not considered dangerous goods.

### IMDG

Not considered dangerous goods.

### IATA

Not considered dangerous goods.

## SECTION 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

# RNA Elution Buffer

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

## Auto-Mag® Total RNA Isolation Kit Material Safety Data Sheet

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

### SECTION 16. OTHER INFORMATION

#### GHS Full Text Phrases

n/a

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