

## MagCore Plasma miRNA Extraction Kit

Revision date: 2024/06/03

Version: 2024-01

### 1. PRODUCT AND COMPANY IDENTIFICATION

Commercial Product number: MagCore Plasma miRNA Extraction Kit

Product number: MMR-01, MMR-03

Intended use: Biochemical Kit

Supplier: RBC Bioscience Corp.

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### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute toxicity (Oral/Inhalation): Category 4

Skin corrosion/irritation: Category 2

Serious eye damage/irritation: Category 2

Respiration sensitization: Category 1

#### GHS Label element

pictograms:



GHS07

Signal Word: Warning

#### Hazard Statements

H302+H332 Harmful if swallowed or if inhaled.

H315+H319 Causes skin and serious eye irritation.

#### Precautionary Statements

##### Prevention

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

##### Response

P301+P312+P330 if swallowed: call a poison center/ doctor if you feel unwell. Rinse mouth.

P302+P352 if on skin: wash with plenty of water.

P305+P351+P338 if in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P337+P313 if eye/skin irritation persists: get medical advice/attention.

P304+P340 if inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing.

#### Other hazards

##### Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

## Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Ammonium Acetate	631-61-8	2-4
Guanidine Hydrochloride	50-01-1	20-25
Guanidine Thiocyanate	593-84-0	20-25
Water	7732-18-5	>46

## 4. FIRST AID MEASURES

### General advice:

Move out of dangerous area. Show this material safety data sheet to the doctor in attendance..

### If inhaled:

If unconscious place in recovery position and seek medical advice. Keep respiratory tract clear. If symptoms persist, call a physician.

### In case of skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

### In case of eye contact:

Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes rinse immediately with plenty of water and seek medical advice. Remove contact lenses. Protect unharmed eye.

### If swallowed:

If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.

### Most important symptoms and effects, both acute and delayed:

Irritation, Vomiting, Diarrhoea, Gastrointestinal complaints.

### Indication of any immediate medical attention and special treatment needed:

No information available

## 5. FIRE FIGHTING MEASURE

### Suitable Extinguishing media:

Use water spray, alcohol-resistant foam, dry extinguishing powder, BC-powder, carbon dioxide.

### Specific hazards arising from the substance or mixture:

Ingredients of the mixture combustible. The product itself does not burn.

### Hazardous combustion products:

Carbon oxides.

### Advice for firefighters:

In the event of fire and/or explosion don't breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personal to safe areas. Avoid breathing dust/fume/gas/mist/vapors/spray. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.



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## **Environmental precautions:**

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

## **Methods and materials for containment and cleaning up:**

Absorb with liquid-binding material. Keep in suitable, closed containers for disposal. See section 13.

## 7. HANDLING AND STORAGE

### **Precautions for safe handling:**

No special measures and necessary. Wash hands before breaks and after work. Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation.

### **Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed in a dry and well-ventilated place.

### **Specific designs for storage room or vessels**

Recommended storage temperature: 15-30°C

### **Specific end use(s):**

No information available.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

### **Ingredients with workplace control parameters**

This product contains no substances with occupational exposure limit values.

### **Exposure controls**

Ensure adequate ventilation. Provide accessible safety shower and eye wash station.

### **Personal protective equipment**

#### **Eye/Face protection:**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH(US) or EN 166(EU)

#### **Skin and body protection:**

Wear impervious protective clothing, including shoes, gloves, apron, coveralls, lab coat, as appropriate to prevent skin contact.

#### **Respiratory protection:**

In the case of vapor formation use a respirator with an approved filter

#### **Hygiene measures**

General industrial hygiene practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid/suspension

Color: No data available.

Odor: No data available.

Odor Threshold: No data available.

pH: No data available.

Melting point/range: No data available.

Boiling point/range: No data available.

Flash point: No data available.

Evaporation rate: No data available.

Burning rate: No data available.

Upper explosion limit: No data available.

Lower explosion limit: No data available.

Vapor pressure: No data available.

Relative vapor density: No data available.



Relative density: No data available.  
 Density: No data available.  
 Solubility: No data available.  
 Water solubility: No data available.  
 Solubility in other solvents: No data available.  
 Partition coefficient n-octanol/water: No data available.  
 Auto ignition temperature: No data available.  
 Thermal decomposition: No data available.  
 Viscosity: No data available.  
 Viscosity, dynamic: No data available.  
 Viscosity, kinematic: No data available.  
 Explosive properties: No data available.  
 Oxidizing properties: No data available.

## 10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.  
 Chemical stability: No decomposition if stored and applied as directed.  
 Possibility of hazardous reactions: Stable under recommended storage conditions.  
 Conditions to avoid: No data available.  
 Incompatible materials: No data available  
 Hazardous decomposition products: No decomposition if stored and applied as directed.

## 11. TOXICOLOGICAL INFORMATION

### Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

#### Acute toxicity

##### Guanidine hydrochloride:

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Guanidine hydrochloride	50-01-1	Oral	556.5 mg/kg
Guanidine hydrochloride	50-01-1	Inhalation: dust/mist	3181mg/l/4h

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Guanidine hydrochloride	50-01-1	Oral	LD50	556.5 mg/kg	Rat
Guanidine hydrochloride	50-01-1	Inhalation: dust/mist	LC50	3181mg/l/4h	Rat
Guanidine hydrochloride	50-01-1	dermal	LD50	>2000mg/kg	Rabbit

##### Guanidine thiocyanate

Acute toxicity of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Source
Guanidine thiocyanate	593-84-0	LD50	593mg/kg	rat	ECHA

#### Skin corrosion/irritation

Causes skin irritation.

**Serious eye damage/eye irritation**

Cause serious eye irritation.

**Respiratory or skin sensitization**

Shall not be classified as a respiratory or skin sensitizer

**Germ Cell mutagenicity**

Shall not be classified as germ cell mutagenic

**Carcinogenicity**

Shall not be classified as carcinogenic

**Reproductive toxicity**

Shall not be classified as a reproductive toxicant

**STOT-single exposure**

Shall not be classified as a specific target organ toxicant (single exposure)

**STOT-repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure)

**Aspiration toxicity**

Shall not be classified as presenting an aspiration hazard

**Symptoms related to the physical, chemical and toxicological characteristics****If swallowed**

diarrhea, vomiting, gastrointestinal complaints

**If in eyes**

Causes serious eye irritation

**If inhaled**

cough, Irritation to respiratory tract, Dyspnea

**If on skin**

causes skin irritation

**Other information**

Other adverse effects: Cardiac arrhythmias, Vertigo

**Endocrine disruption properties**

None of the ingredients are listed

**Information on other hazards**

There is no additional information

## 12. Ecological Information

**Toxicity**

Shall not be classified as hazardous to the aquatic environment.

**Guanidine hydrochloride**

Acute toxicity(acute) of components of the mixture					
Name of substance	CAS No	Exposure time	Endpoint	Value	Species
Guanidine hydrochloride	50-01-1	48h	EC50	70.2mg/l	Aquatic invertebrates
Guanidine hydrochloride	50-01-1	72h	ErC50	33.5mg/l	algae

**Guanidine thiocyanate**

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure time	Endpoint	Value	Species



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Guanidine thiocyanate	593-84-0	96h	LC50	89.1mg/l	fish
Guanidine thiocyanate	593-84-0	48h	EC50	42.4mg/l	Aquatic invertebrates
Guanidine thiocyanate	593-84-0	72h	ErC50	130mg/l	Algae
Guanidine thiocyanate	593-84-0	28d	EC50	>185mg/l	Microorganisms

## Biodegradation

No data available

## Persistence and degradability

No data available

## Bio accumulative potential

### Guanidine hydrochloride

Partition coefficient n-octanol/water: log Pow: ca.-1.7 (20°C)

### Guanidine thiocyanate

Partition coefficient n-octanol/water: log Pow: ca.-1.5 (20°C)

## Mobility in soil

No data available

## Results of PBT and vPvB assessment

No data available

## Endocrine disrupting properties

No data available

## Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment Methods

The product must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

### Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions

## 14. TRANSPORT INFORMATION

### UN number or ID number:

Not subject to transport regulations.

### UN proper shipping name:

Not assigned

### Transport hazard class(es):

None

### Packing group, if applicable:

Not assigned

### Environmental hazards:

non-environmentally hazardous acc.to the dangerous goods regulations.

### Special precaution for user

There is no additional information.

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not applicable



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## **Maritime transport in bulk according to IMO instruments**

The cargo is not intended to be carried in bulk

## **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) –**

### **Additional information:**

Not subject to ADR, RID and ADN

## **International Maritime Dangerous Goods Code (IMDG) - Additional information**

Not subject to IMDG.

## **International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

Not subject to ICAO-IATA.

## 15. REGULATORY INFORMATION

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

#### **Relevant provisions of the European Union (EU)**

Restrictions according to REACH, Annex XVII.

#### **List of substances subject to authorization (REACH, Annex XIV)/SVHC - candidate list**

None of the ingredients are listed.

#### **Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)**

None of the ingredients are listed.

#### **Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

None of the ingredients are listed.

#### **Regulation on the marketing and use of explosives precursors**

None of the ingredients are listed.

#### **Regulation on substances that deplete the ozone layer (ODS)**

None of the ingredients are listed.

#### **Regulation concerning the export and import of hazardous chemicals (PIC)**

None of the ingredients are listed.

#### **Regulation on persistent organic pollutants (POP)**

None of the ingredients are listed.

#### **Other International Inventories**

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

## 16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.