

Reviewed on 12/08/2016

1 Identification

- · Product identifier
- · Trade name: MiniPrepTM Express Solution
- · Article number: 2000201
- · Application of the substance / the mixture For Research Use Only
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier: MP Biomedicals, LLC

29525 Fountain Parkway

Solon, OH 44139 United States www.mpbio.com

- · Information department: Quality Control Department
- · Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



GHS05 Corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS05

GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

Guanidine Thiocyanate, molecular biology reagent

· Hazard statements

 $Harmful\ if\ swallowed,\ in\ contact\ with\ skin\ or\ if\ inhaled.$

Causes severe skin burns and eye damage.

· Precautionary statements

Do not breathe dusts or mists.

Wear protective gloves / protective clothing.

Wear eye protection / face protection.

Wash thoroughly after handling.

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

(Contd. on page 2)

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

(Contd. of page 1)

Use only outdoors or in a well-ventilated area.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 593-84-0 Guanidine Thiocyanate, molecular biology reagent 50-90% EINECS: 209-812-1

4 First-aid measures

- · Description of first aid measures
- · General information:

Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.

· After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.

- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist consult a Doctor.

(Contd. on page 3)

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

(Contd. of page 2)

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

 $\cdot \textit{Methods and material for containment and cleaning up:} \\$

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Pick up mechanically, dispose contaminated material as waste according to Section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 15-30 °C
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see Section 7.

(Contd. on page 4)

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

(Contd. of page 3)

· Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Suspension

Color: According to product specification

Odor: IndeterminateOdor threshold: Not determined.

· pH-value: Not determined.

 $(Contd.\ on\ page\ 5)$

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

	(Contd. of page
· Change in condition Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	See section 10
· Explosion limits: Lower: Upper:	Not Applicable Not Applicable
· Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)
 Density: Relative density Vapor density Evaporation rate 	Not Applicable Not determined. Not determined. Not determined.
· Solubility in / Miscibility with · Water:	Not Determined Soluble.
· Partition coefficient (n-octanol/wate	er): Not determined.
· Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents: Water: VOC content:	0.0 % 35.5 % 0.0 g/l / 0.00 lb/gl
Solids content: Other information	1.5 % No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

US

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

(Contd. of page 5)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

 ${\it The product shows the following dangers according to internally approved calculation methods for preparations:}$

Harmful Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7631-86-9 silicon dioxide, chemically prepared

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Can not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- **Recommendation:** Discard must be made according to official regulations.

(Contd. on page 7)

Printing date 12/08/2016 Reviewed on 12/08/2016

 $\textit{Trade name: MiniPrep}^{\text{TM}} \textit{Express Solution}$

 $\cdot \textbf{Recommended cleansing agent:} \ \textit{Water, if necessary with cleaning agents}.$

(Contd. of page 6)

4.T	
Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	UN1760
· UN proper shipping name · DOT	Companies liquida es a (Cuanidia Thiomanata malacular biolo
	Corrosive liquids, n.o.s. (Guanidine Thiocyanate, molecular biologreagent)
· ADR	1760 Corrosive liquids, n.o.s. (Guanidine Thiocyanate, molecul biology reagent)
· IMDG, IATA	CORROSIVE LIQUID, N.O.S. (Guanidine Thiocyanate, molecul biology reagent)
· Transport hazard class(es)	
· DOT	
CORROSIVE	
· Class	8 Corrosive substances
· Label 	8
· Class	8 Corrosive substances
· Label	8
· Packing group · DOT, ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
· Marine pollutant:	Yes (DOT)
· Special precautions for user	Warning: Corrosive substances
· Danger code (Kemler):	80 E A C B
· EMS Number:	F-A,S-B
· Stowage Category · Stowage Code	A SW2 Clear of living quarters.
· Transport in bulk according to Annex MARPOL73/78 and the IBC Code	
· Transport/Additional information:	аррисион.
i i anapoi uziummonun injoi munon.	
DOT	
· DOT · Quantity limitations	On passenger aircraft/rail: 5 I
· DOT · Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

	(Contd. of page 7)
· ADR	
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· <i>IMDG</i>	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN ''Model Regulation'':	UN 1760 CORROSIVE LIQUIDS, N.O.S. (GUANIDINE
	THIOCYANATE, MOLECULAR BIOLOGY REAGENT), 8, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 9)

(Contd. of page 8)

Safety Data Sheet acc. to OSHA HCS

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

· Hazard pictograms





· Signal word Danger

· Hazard-determining components of labeling:

Guanidine Thiocyanate, molecular biology reagent

· Hazard statements

Harmful if swallowed, in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

· Precautionary statements

Do not breathe dusts or mists.

Wear protective gloves / protective clothing.

Wear eye protection / face protection.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Take off contaminated clothing and wash it before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been 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.

- · Department issuing SDS: Quality Control Dept.
- · Date of preparation / last revision 12/08/2016 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

(Contd. on page 10)

Printing date 12/08/2016 Reviewed on 12/08/2016

Trade name: MiniPrepTM Express Solution

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

(Contd. of page 9)

HC