

Kit components

Product code	Description
FF3760	Wizard® Magnetic 96 DNA Plant System

Components:

A381	Wash Buffer, Plant
FF377	MagneSil® Paramagnetic Particles
A916	Collection Plates - Article
A919A	Lysis Buffer B, Plant
Z919A	Lysis Buffer A, Plant

Safety Data Sheet
acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

1 Identification

Product identifier

Trade name: Wash Buffer, Plant

Article number: A381

Application of the substance / the preparation: Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-608-274-4330
1-800-356-9526

SDS author: Regulatory.Affairs@promega.com

Further information obtainable from:

Promega UK
Delta House
Southampton Science Park
Southampton SO16 7NS
United Kingdom
Tel: (44) 23 8076 0225
Fax: (44) 23 8076 7014
Freephone: 0800 378994
E-mail Address: ukcustserve@promega.com

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted). Within UK +(44)-870-8200418.

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonised System (GHS).

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Wash Buffer, Plant

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterisation: Mixtures

Description:

The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances.

Components: Not applicable

Additional information: For the wording of the listed hazard phrases refer to section 15

4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed

None

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

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice.

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions:

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

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

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 13 for disposal information.

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Wash Buffer, Plant

(Contd. of page 2)

7 Handling and storage

Handling

Precautions for safe handling No special measures required.

Information about fire - and explosion protection: The product is not flammable

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Ingredients 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 valid during the making were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands: Not required.

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.

Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined.

pH-value at 20 °C (68 °F): 8.4

Change in condition

Melting point/freezing point:	0 °C (32 °F)
Initial boiling point and boiling range:	100 °C (212 °F)
Flash point:	Not applicable

Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Wash Buffer, Plant

(Contd. of page 3)

Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Water:	97.0 %
Solids content:	3.1 %
Other information	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

11 Toxicological information

Information on toxicological effects
Acute toxicity
LD/LC50 values relevant for classification: No data available
Primary irritant effect:
Skin corrosion/irritation No irritant effect.
Serious eye damage/irritation No irritating effect.
Respiratory or skin sensitisation No sensitising effects known.
Additional toxicological information:
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Wash Buffer, Plant

(Contd. of page 4)

12 Ecological information

Toxicity**Aquatic toxicity:**

Not available

No further relevant information available.

Persistence and degradability:

Not available

No further relevant information available.

Behaviour in environmental systems:**Bioaccumulative potential**

Not known

No further relevant information available.

Mobility in soil No further relevant information available.**Ecotoxicological effects:****Remark:** Not available**Additional ecological information:****General notes:** Not known to be hazardous to water.**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**

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.

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

UN-Number ADR, ADN, IMDG, IATA	Not hazardous for transportation Not applicable
UN proper shipping name ADR, ADN, IMDG, IATA	None Not applicable
Transport hazard class(es) ADR, ADN, IMDG, IATA	None
Class	Not applicable
Packing group ADR, IMDG, IATA	None Not applicable
Environmental hazards: Marine pollutant:	No

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Wash Buffer, Plant

(Contd. of page 5)

Special precautions for user *Not applicable.*

Transport in bulk according to Annex II of Marpol and the IBC Code *Not applicable.*

UN "Model Regulation": *Not applicable*

15 Regulatory information

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

GHS label elements *Not applicable*

Signal word *Not applicable*

Hazard statements *Not applicable*

Directive 2012/18/EU

Named dangerous substances - ANNEX I

None of the ingredients is listed. This product is for research and development use only.

Waterhazard class: Water hazard class 1 (Self-assessment): *slightly hazardous for water.*

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:

Promega Corporation

Safety Department

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

Date of preparation / last revision *11/14/2019 / -*

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

IATA: International Air Transport Association

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

*** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

1 Identification

Product identifier

Trade name: *MagneSil® Paramagnetic Particles*

Article number: *FF377*

Application of the substance / the preparation: *Laboratory chemicals*

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

*Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-608-274-4330
1-800-356-9526*

SDS author: Regulatory.Affairs@promega.com

Further information obtainable from:

*Promega UK
Delta House
Southampton Science Park
Southampton SO16 7NS
United Kingdom
Tel: (44) 23 8076 0225
Fax: (44) 23 8076 7014
Freephone: 0800 378994
E-mail Address: ukcustserve@promega.com*

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted). Within UK +(44)-870-8200418.

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonised System (GHS).

Label elements

GHS label elements *Not applicable*

Hazard pictograms *Not applicable*

Signal word *Not applicable*

Hazard statements *Not applicable*

Other hazards

Results of PBT and vPvB assessment

PBT: *Not applicable.*

vPvB: *Not applicable.*

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: MagneSil® Paramagnetic Particles

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterisation: Mixtures

Description:

The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances.

Components:

1309-37-1	iron trioxide	1-5%
-----------	---------------	------

Additional information: For the wording of the listed hazard phrases refer to section 15

4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Immediately wash with soap, water and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed Allergic reactions

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

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice.

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions:

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 13 for disposal information.

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: MagneSil® Paramagnetic Particles

(Contd. of page 2)

7 Handling and storage

Handling

Precautions for safe handling

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection: The product is not flammable

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Ingredients 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 valid during the making were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures

Immediately remove all soiled and contaminated clothing

Do not eat or drink while working.

Clean skin thoroughly immediately after handling the product.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands: Not required.

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.

Eye protection: Safety glasses

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined.

Change in condition

Melting point/freezing point: undetermined

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: MagneSil® Paramagnetic Particles

(Contd. of page 3)

Initial boiling point and boiling range:	100 °C (212 °F)
Flash point:	Not applicable
Flammability (solid, gaseous)	Not applicable.
Ignition temperature:	>370 °C (>698 °F)
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Water:	89.2 %
Solids content:	10.3 %
Other information	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

11 Toxicological information

Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification: No data available

Primary irritant effect:

Skin corrosion/irritation No irritant effect.

Serious eye damage/irritation No irritating effect.

Respiratory or skin sensitisation No sensitising effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: MagneSil® Paramagnetic Particles

(Contd. of page 4)

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Irritant

* 12 Ecological information

Toxicity

Aquatic toxicity:

Not available

No further relevant information available.

Persistence and degradability:

Not available

No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Not available

Additional ecological information:

General notes: Not known to be hazardous to water.

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

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.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

* 14 Transport information

UN-Number

ADR, ADN, IMDG, IATA

Not hazardous for transportation

Not applicable

UN proper shipping name

ADR, ADN, IMDG, IATA

None

Not applicable

Transport hazard class(es)

ADR, ADN, IMDG, IATA

None

Class

Not applicable

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: MagneSil® Paramagnetic Particles

(Contd. of page 5)

Packing group ADR, IMDG, IATA	None Not applicable
--	------------------------

Environmental hazards: Marine pollutant:	No
---	----

Special precautions for user	Not applicable.
-------------------------------------	-----------------

Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
---	-----------------

UN "Model Regulation":	Not applicable
-------------------------------	----------------

15 Regulatory information

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

GHS label elements Not applicable

Signal word Not applicable

Hazard statements Not applicable

Directive 2012/18/EU

Named dangerous substances - ANNEX I

None of the ingredients is listed. This product is for research and development use only.

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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:

Promega Corporation

Safety Department

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

Date of preparation / last revision 11/14/2019 / -

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

IATA: International Air Transport Association

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

*** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

* **1 Identification**

Product identifier

Trade name: Collection Plates - Article

Article number: A916

Application of the substance / the preparation: Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-608-274-4330
1-800-356-9526

SDS author: Regulatory.Affairs@promega.com

Further information obtainable from:

Promega UK
Delta House
Southampton Science Park
Southampton SO16 7NS
United Kingdom
Tel: (44) 23 8076 0225
Fax: (44) 23 8076 7014
Freephone: 0800 378994
E-mail Address: ukcustserve@promega.com

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted). Within UK +(44)-870-8200418.

* **2 Hazard(s) identification**

Classification of the substance or mixture

This product contains a CRM (carcinogen, reproductive hazard or mutagen) at a level below 1% and greater than 0.1%. Although CRMs at this level are below notification under the CLP, our labels reflect the pictogram and hazard statement to communicate this hazard to our customers. Please use caution when working with this material.

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Collection Plates - Article

vPvB: Not applicable.

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterisation: Substances

CAS No. Description:

Article

* 4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed

None

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

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice.

Protective equipment: No special measures required.

* 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

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

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 13 for disposal information.

* 7 Handling and storage

Handling

Precautions for safe handling No special measures required.

Information about fire - and explosion protection: The product is not flammable

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Collection Plates - Article

(Contd. of page 2)

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

* 8 Exposure controls/personal protection

Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

Additional information: The lists valid during the making were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands: Not required.

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.

Eye protection: Not required.

* 9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Solid.
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined.

pH-value: Not applicable.

Change in condition

Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	undetermined
Flash point:	Not applicable

Flammability (solid, gaseous) Product is not flammable.

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure: Not applicable.

Density: Not determined

Relative density Not determined.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Collection Plates - Article

(Contd. of page 3)

Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water:	Insoluble
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Other information	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

* 11 Toxicological information

Information on toxicological effects
Acute toxicity
LD/LC50 values relevant for classification: No data available
Primary irritant effect:
Skin corrosion/irritation No irritant effect.
Serious eye damage/irritation No irritating effect.
Respiratory or skin sensitisation No sensitising effects known.
Additional toxicological information:
The substance is not subject to classification according to the latest version of the EU lists.

* 12 Ecological information

Toxicity
Aquatic toxicity:
Not available
No further relevant information available.
Persistence and degradability:
Not available
No further relevant information available.
Behaviour in environmental systems:
Bioaccumulative potential
Not known
No further relevant information available.
Mobility in soil No further relevant information available.
Ecotoxicological effects:
Remark: Not available
Additional ecological information:
General notes: Not known to be hazardous to water.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Collection Plates - Article

(Contd. of page 4)

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

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.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

* 14 Transport information

UN-Number ADR, ADN, IMDG, IATA	Not hazardous for transportation Not applicable
UN proper shipping name ADR, ADN, IMDG, IATA	None Not applicable
Transport hazard class(es) ADR, ADN, IMDG, IATA	None
Class	Not applicable
Packing group ADR, IMDG, IATA	None Not applicable
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
UN "Model Regulation":	Not applicable

* 15 Regulatory information

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

GHS label elements Not applicable

Signal word Not applicable

Hazard statements Not applicable

Directive 2012/18/EU

Named dangerous substances - ANNEX I

Substance is not listed. This product is for research and development use only.

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Collection Plates - Article

(Contd. of page 5)

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:

Promega Corporation
 Safety Department
 2800 Woods Hollow Road
 Madison, WI 53711
 U.S.A.

Date of preparation / last revision 11/14/2019 / -

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

IATA: International Air Transport Association

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

*** Data compared to the previous version altered.**

US

Safety Data Sheet
acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

1 Identification

Product identifier

Trade name: Lysis Buffer B, Plant

Article number: A919A

Application of the substance / the preparation: Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-608-274-4330
1-800-356-9526

SDS author: Regulatory.Affairs@promega.com

Further information obtainable from:

Promega UK
Delta House
Southampton Science Park
Southampton SO16 7NS
United Kingdom
Tel: (44) 23 8076 0225
Fax: (44) 23 8076 7014
Freephone: 0800 378994
E-mail Address: ukcustserve@promega.com

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted). Within UK +(44)-870-8200418.

2 Hazard(s) identification

Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonised System (GHS).

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer B, Plant

(Contd. of page 1)

3 Composition/information on ingredients

Chemical characterisation: Mixtures

Description:

The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances.

Components:

1185-53-1	Tris HCl	1-5%
-----------	----------	------

Additional information: For the wording of the listed hazard phrases refer to section 15

4 First-aid measures

Description of first aid measures

General information: No special measures required.

After inhalation: If the patient feels unwell or is concerned, obtain medical advice.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed

None

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

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice.

Protective equipment: No special measures required.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures Not required.

Environmental precautions:

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

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

Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling

See Section 13 for disposal information.

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer B, Plant

(Contd. of page 2)

7 Handling and storage

Handling

Precautions for safe handling No special measures required.

Information about fire - and explosion protection: The product is not flammable

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Ingredients 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 valid during the making were used as basis.

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands: Not required.

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.

Eye protection: Not required.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined.

pH-value at 20 °C (68 °F): 7.3

Change in condition

Melting point/freezing point:	0 °C (32 °F)
Initial boiling point and boiling range:	undetermined
Flash point:	Not applicable

Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer B, Plant

(Contd. of page 3)

Auto-ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Water:	97.7 %
Other information	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

11 Toxicological information

Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification: No data available

Primary irritant effect:

Skin corrosion/irritation No irritant effect.

Serious eye damage/irritation No irritating effect.

Respiratory or skin sensitisation No sensitising effects known.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12 Ecological information

Toxicity

Aquatic toxicity:

Not available

No further relevant information available.

(Contd. on page 5)

-US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer B, Plant

(Contd. of page 4)

Persistence and degradability:*Not available**No further relevant information available.***Behaviour in environmental systems:****Bioaccumulative potential***Not known**No further relevant information available.***Mobility in soil** *No further relevant information available.***Ecotoxicological effects:****Remark:** *Not available***Additional ecological information:****General notes:** *Not known to be hazardous to water.***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***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.***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.***Recommended cleansing agents:** *Water, if necessary together with cleansing agents.*

14 Transport information

UN-Number <i>ADR, ADN, IMDG, IATA</i>	<i>Not hazardous for transportation</i> <i>Not applicable</i>
UN proper shipping name <i>ADR, ADN, IMDG, IATA</i>	<i>None</i> <i>Not applicable</i>
Transport hazard class(es) <i>ADR, ADN, IMDG, IATA</i>	<i>None</i>
Class	<i>Not applicable</i>
Packing group <i>ADR, IMDG, IATA</i>	<i>None</i> <i>Not applicable</i>
Environmental hazards: Marine pollutant:	<i>No</i>
Special precautions for user	<i>Not applicable.</i>
Transport in bulk according to Annex II of Marpol and the IBC Code	<i>Not applicable.</i>

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer B, Plant

(Contd. of page 5)

UN "Model Regulation":

Not applicable

15 Regulatory information

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

GHS label elements *Not applicable*

Signal word *Not applicable*

Hazard statements *Not applicable*

Directive 2012/18/EU

Named dangerous substances - ANNEX I

None of the ingredients is listed. This product is for research and development use only.

Waterhazard class: *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

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:

Promega Corporation

Safety Department

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

Date of preparation / last revision *11/14/2019 / -*

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

IATA: International Air Transport Association

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

*** Data compared to the previous version altered.**

Safety Data Sheet
acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

1 Identification

Product identifier

Trade name: Lysis Buffer A, Plant

Article number: Z919A

Application of the substance / the preparation: Laboratory chemicals

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.
1-608-274-4330
1-800-356-9526

SDS author: Regulatory.Affairs@promega.com

Further information obtainable from:

Promega UK
Delta House
Southampton Science Park
Southampton SO16 7NS
United Kingdom
Tel: (44) 23 8076 0225
Fax: (44) 23 8076 7014
Freephone: 0800 378994
E-mail Address: ukcustserve@promega.com

Emergency telephone number:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted). Within UK +(44)-870-8200418.

2 Hazard(s) identification

Classification of the substance or mixture



GHS05 corrosion

Skin Corr. 1B 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 H332 Harmful if inhaled.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 1)

Label elements

GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).

Hazard pictograms GHS05, GHS07

Signal word Danger

Hazard-determining components of labelling:

guanidinium thiocyanate

Hazard statements

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

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

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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).

Wash contaminated clothing before reuse.

Store locked up.

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

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterisation: Mixtures**Description:**

The product is a mixture of the hazardous substances listed below along with unlisted nonhazardous substances.

Components:

593-84-0	guanidinium thiocyanate	25-50%
----------	-------------------------	--------

Additional information: For the wording of the listed hazard phrases refer to section 15

4 First-aid measures

Description of first aid measures**General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Seek medical treatment.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 2)

In case of unconsciousness place patient stably in side position for transportation.

Seek medical treatment in case of complaints.

After skin contact:

Immediately wash with soap, water and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact: *Call a doctor immediately.*

After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Seek immediate medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed

None

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

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters *In the case of fire, wear respiratory protective equipment and chemical protective suit.*

Protective equipment: *Mount respiratory protective device.*

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Keep people at a distance and stay on the windward side.

Wear protective clothing.

Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

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

Methods and material for containment and cleaning up:

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

Use neutralising agent.

Dispose contaminated material as waste according to Section 13.

Ensure adequate ventilation.

Keep away from water.

Reference to other sections

See Section 7 for information on safe handling

See Section 13 for disposal information.

US

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 3)

7 Handling and storage

Handling

Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about fire - and explosion protection: The product is not flammable

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Do not store together with acids.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Control parameters

Ingredients 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 valid during the making 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.

Do not eat or drink while working.

Clean skin thoroughly immediately after handling the product.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves.

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

Select the glove material considering penetration time, rate of diffusion and degradation time.

The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it or AS/NZS 2161.

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.

Eye protection:

Tightly sealed goggles.

(Contd. on page 5)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 4)

Use equipment for eye protection tested and approved under government standard EN 166(EU) or AS/NZS 1336, 1137 and 1138.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Not determined
Odour threshold:	Not determined.

pH-value at 20 °C (68 °F): 7.9

Change in condition

Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	100 °C (212 °F)
Flash point:	Not applicable

Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.

Density at 20 °C (68 °F): 1.102 g/cm³ (9.19619 lbs/gal)

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with

Water:	Fully miscible
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
Water:	52.7 %

Solids content: 48.0 %

Other information 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:

Exposure to strong acid will result in the generation of toxic gases

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 5)

Exposure to bleach may result in the generation of toxic gas
Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

Information on toxicological effects

Acute toxicity

LD/LC50 values relevant for classification:

593-84-0 guanidinium thiocyanate

Oral	LD50	475 mg/kg (Rat) By analogy to guanidine hydrochloride
Dermal	LD50	>2,000 mg/kg (Rabbit) By analogy to Guanidine hydrochloride.

Primary irritant effect:

Skin corrosion/irritation Caustic effect on skin and mucous membranes.

Serious eye damage/irritation Strong caustic effect.

Respiratory or skin sensitisation Sensitization possible through inhalation.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Harmful

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

Toxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects

Persistence and degradability:

Not available

No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Harmful to fish

Additional ecological information:

General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Harmful to aquatic organisms

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

US

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 6)

13 Disposal considerations

Waste treatment methods

Recommendation

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.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

UN-Number

ADR, IMDG, IATA

UN1760

UN proper shipping name

ADR

IMDG, IATA

None

1760 CORROSIVE LIQUID, N.O.S. solution

CORROSIVE LIQUID, N.O.S. solution

Transport hazard class(es)

ADR

None



Class

8 (C9) Corrosive substances.

Label

8

IMDG, IATA



Class

8 Corrosive substances.

Label

8

Packing group

ADR, IMDG, IATA

None

II

Environmental hazards:

Marine pollutant:

No

Special precautions for user

Danger code (Kemler):

EMS Number:

Stowage Category

Stowage Code

Warning: Corrosive substances.

80

F-A,S-B

B

SW2 Clear of living quarters.

Transport in bulk according to Annex II of Marpol
and the IBC Code

Not applicable.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 7)

Transport/Additional information:**ADR****Limited quantities (LQ)**

1L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

Transport category

2

Tunnel restriction code

E

IMDG**Limited quantities (LQ)**

1L

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation":

UN 1760 CORROSIVE LIQUID, N.O.S. SOLUTION, 8, II

15 Regulatory information

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

GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).

Signal word Danger

Hazard-determining components of labelling:

guanidinium thiocyanate

Hazard statements

Harmful if swallowed or if inhaled.

Causes severe skin burns and eye damage.

Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

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

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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).

Wash contaminated clothing before reuse.

Store locked up.

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

Directive 2012/18/EU**Named dangerous substances - ANNEX I**

None of the ingredients is listed. This product is for research and development use only.

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 9)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 11/14/2019

Revision: 11/14/2019

Trade name: Lysis Buffer A, Plant

(Contd. of page 8)

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:

Promega Corporation
Safety Department
2800 Woods Hollow Road
Madison, WI 53711
U.S.A.

Date of preparation / last revision 11/14/2019 / -

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

IATA: International Air Transport Association

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

*** Data compared to the previous version altered.**