SAFETY DATA SHEET

Revision Date 06/14/2019



SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code

Product name

F0302

PureBind Beads

Company/Undertaking Identification

Ocean NanoTech, LLC. 7964 Arjons Dr. Suite G San Diego, CA 92126 858-689-8808 info@oceannanotech.com

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

GHS - Classification

Signal Word None

Hazard pictograms None

Health hazards Not classified

Physical hazards Not classified

Environmental hazards Not classified

Hazard Statements Not Applicable

Precautionary Statements Prevention Not Applicable

Response Not Applicable

Storage Not Applicable

Disposal Not Applicable

Other hazards

Not Applicable

HMIS

Component	CAS-No	EINECS-No	Weight %
SODIUM	26628-22-8	-	< 0.1
AZIDE			
26628-22-8 (< 0.1)			

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures			
Skin contact	Rinse cautiously with water for several minutes. Immediate medical attention is not required.		
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.		
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.		
inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.		
Most important symptoms and effects, both acute and delayed Not Applicable			
Notes to Physician	Treat symptomatically.		

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide (CO2). Foam. Dry chemical. Unsuitable extinguishing media No information available.

Special hazards arising from the substance or mixture Not known.

Advice for fire-fighters

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment. See Section 8 for more detail.

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Use personal protective equipment as required. .

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

Research Use Only. Not for use in diagnostic procedures.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
SODIUM AZIDE	None	None	None	None
	Engineering measures			

Engineering measures

Ensure adequate ventilation, especially in confined areas

Exposure controls

Personal Protective Equipment

Respiratory protection	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.	
Hand protection	Wear suitable gloves Glove material: Compatible chemical-resistant gloves.	
Eye protection	Tight sealing safety goggles	
Skin and Body Protection	Wear suitable protective clothing	
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice	

Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance Odor	suspension No data available	
Melting point / melting range Boiling point / boiling range Flash point Autoignition Temperature Decomposition temperature Evaporation rate	 °C Mixture has not been tested No data available 	ዮ ዮ ዮ ዮ ዮ

- °F Mixture has not been tested

Flammability (solid, gas)	No data available		
Upper explosion limit	Mixture has not been tested		
Lower explosion limit	Mixture has not been tested		
Vapor Pressure	Mixture has not been tested		
Relative density	Mixture has not been tested		
Specific gravity	No data available		
Solubility	No data available		
Partition coefficient:	No data available		
n-octanol/water Explosive properties	Mixture has not been tested		
Other information	No data available		
	SECTION 10: Stability and reactivity		
Reactivity	Sodium azide may react with lead and copper plumbing to form highly explosive metal azides.		
Chemical stability	Stable under normal conditions.		
Possibility of hazardous reactions	Hazardous reaction has not been reported.		
Conditions to avoid	No information available.		
Incompatible materials	No dangerous reaction known under conditions of normal use.		
Hazardous decomposition products	No data available.		
	SECTION 11: Toxicological information		

SECTION 11: Toxicological information

Information on toxicological effects

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
SODIUM AZIDE	= 27 mg/kg (Rat)	No data available	No data available

Principal Routes of Exposure

Irritation	Conclusive but not sufficient for classification
Corrosivity	Conclusive but not sufficient for classification
Sensitization	Conclusive but not sufficient for classification
STOT - Single Exposure	Conclusive but not sufficient for classification
STOT - Repeated Exposure	Conclusive but not sufficient for classification
Carcinogenicity	Conclusive but not sufficient for classification

Mutagenicity

Conclusive but not sufficient for classification

Reproductive toxicity

Conclusive but not sufficient for classification Conclusive but not sufficient for classification

Aspiration hazard

SECTION 12: Ecological information

Toxicity

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
SODIUM AZIDE	No data available	No data available	No data available	No data available	No data available

Persistence and degradability No information available. Bioaccumulative

potential No information available.

Results of PBT and vPvB assessment

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

Other adverse effects

No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable
Environmental hazards	Not Applicable
Special precautions for user	Not Applicable
Transport in bulk according to A	

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
SODIUM AZIDE 26628-22-8 (< 0.1)	Listed

US Federal Regulations

SARA 313

This product is not regulated by SARA. <u>Chemical Name CAS-No Weight % SARA 313 - Threshold Values</u> SODIUM AZIDE 26628-22-8 < 0.1 1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

Reason for revisionSDS sections updated.Revision number1.0Revision date18-Feb-2019For Research Use Only. Not for use in diagnostic procedures.

References

- ECHA: http://echa.europa.eu/
- TOXNET: http://toxnet.nlm.nih.gov/
- eChemPortal: http://www.echemportal.org/
- · LOLI database: https://www.chemadvisor.com/loli-database

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 06/14/2019



1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code	R1247
Product name	Lysis Buffer

Company/Undertaking Identification

Ocean NanoTech, LLC. 7964 Arjons Dr. Suite G San Diego, CA 92126 858-689-8808 info@oceannanotech.com

For research use only. Not for human or animal therapeutic or diagnostic use.

2. Hazards identification

GHS - Classification

Signal Word WARNING



Health Hazard

Acute oral toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

<u>Physical Hazards</u>

Hazard statements H302 - Harmful if swallowed H319 - Causes serious eye irritation H315 - Causes skin irritation

Precautionary statements

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Principle Routes of Exposure/ Potential Health effects Eyes Skin Inhalation Ingestion	Irritating to eyes. Irritating to skin. May be harmful by inhalation. Harmful if swallowed.		
Specific effects			
Carcinogenic effects	none		
Mutagenic effects	none		
Reproductive toxicity	none		
Sensitization	none		
Target Organ Effects	none		
HMIS			
Health	2		
Flammability	0		
Reactivity	0		
	3. Composition/information	on on ingredients	
Chemical Name	CAS-No	EINECS-No	Weight %
Guanidine hydrochloride	50-01-1	200-002-3	< 70
Tween 20	9005-64-5	500-018-3	< 30
We recommend handling all chem	icals with caution.	·	

We recommend handling all chemicals with caution.

4. First aid measures				
Skin contact	Wash off immediately with plenty of water. If symptoms persist, call a physician.			
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If eye irritation persists, consult a specialist.			
Ingestion	Rinse mouth. Call a physician or Poison Control Centre immediately.			
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.			
Notes to physician	Treat symptomatically.			

5. Fire-fighting measures

Suitable extinguishing media Special protective equipment for firefighters

Dry chemical. Water spray.

Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions Use personal protective equipment. Ensure adequate ventilation. Methods for cleaning up Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage

Handling	
Storage	

Always wear recommended Personal Protective Equipment. Keep in properly labelled containers. Keep in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection					
Exposure limits					
Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)	
Guanidine hydrochloride	none	none	none	none	
Tween 20	none	none	none	none	
Engineering measures Ensure adequate ventilation, especially in confined areas.					

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection Eye protection	Impervious gloves. Gogales.
Skin and body protection.	Lightweight protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure	Prevent product from entering drains.

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controls

	9.	Physical and ch	emical properties	S	
General Information					
Form	liquid				
Appearance	No information available				
Odor	No information available				
Boiling Point/Range Melting point/range	° C no data available	°F no data available			
Flash point Autoignition	°C no data available	°F no data available			
temperature	°C no data available °C no data available	°F no data available °F no data available			
Oxidizing	No information				
properties	no data availab	le			
Water solubility pH VALUE	6.5				
	10. Stal reactivi	bility and ty			

Stability Materials to avoid Hazardous decomposition	Stable under normal conditions. No information available. No information available.
products polymerization	Hazardous polymerization does not occur.
	11. Toxicological information

Acute toxicity

Chemical Name	LD50 (oral,r	at/mouse)	LD50 (dermal,rat/rab	bit) LC50 (in	halation,rat/mouse)
Guanidine hydrochloride	no data a	vailable	> 2000 mg/kg (Rabb	it) no	data available
Tween 20	= 36700 µl	/kg (Rat)	no data available	no	data available
Principle Routes of Expo	osure/				
Potential Health effects	Irritating	to eyes.			
Eyes	Irritating	to skin.			
Skin	May be l	narmful by			
Inhalation	inhalatio	n.			
Ingestion	Harmful	if swallowed.			
Carcinogenic effects	none				
Mutagenic effects	none				
Reproductive toxicity	none none				
Sensitization	none				
Target Organ Effects	none				
	1	2. Ecological ir	nformation		
Ecotoxicity effects	No infor	nation available			
Mobility	No information available.				
Biodegradation	No infor	mation available			
Bioaccumulation	No information available.				
Chemical Name	Freshwater Algae	Water Flea Data	Freshwater Fish	Microtox Data	log Pow

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Guanidine hydrochloride 50-01-1					logPow<=-1.7

13. Disposal considerations	
Dispose of in accordance with local regulations.	
14. Transport information	

<u>IATA</u>	
Proper shipping name	
Hazard class	
Subsidiary Class	
Packing group	
UN-No	Not classified as dangerous in the meaning of transport
	regulations none none none
	45. Demulatemu information

15. Regulatory information	
Component	TSCA
Guanidine hydrochloride 50-01-1 (30-60)	Listed
Tween 20 9005-64-5(10 - 30)	Listed

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) This product does not contains HAPs.

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Guanidine hydrochloride	-	-	-	-	-
Tween 20	-	-	-	-	-

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

D2B Toxic materials



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision

not applicable. (M)SDS sections updated.

For research use only. Not for human or animal therapeutic or diagnostic use.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 06/14/2019



1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code	R0510
Product name	Elution Buffer

Company/Undertaking Identification

Ocean NanoTech, LLC. 7964 Arjons Dr. Suite G San Diego, CA 92126 858-689-8808 info@oceannanotech.com

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification		
GHS - Classification		
Signal Word	not hazardous	
Health Hazard	not hazardous	
Physical Hazards	not hazardous	
<u>Principle Routes of Exposure/</u> <u>Potential Health effects</u> Eyes Skin	May cause eye irritation with susceptible persons. May cause skin irritation in susceptible persons.	
Inhalation	May be harmful by inhalation.	
Ingestion	May be harmful if swallowed.	
<u>Specific effects</u> Carcinogenic effects Mutagenic effects Reproductive toxicity Sensitization	none none none	
Target Organ Effects HMIS	No known effects under normal use conditions.	
Health	0	
Flammability	0	
Reactivity	0	
3. Composition/information on ingredients		

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First aid measures

Skin contact Eye contact	Rinse with plenty of water. If symptoms arise, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Water spray. Carbon dioxide (CO2). Foam. Dry chemical. **Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage		
Handling	Always wear recommended Personal Protective Equipment. No special handling advice required.	
Storage	Keep in a dry, cool and well-ventilated place.	
8. Exposure controls/personal protection		

Exposure limits

We are not aware of any national exposure limit.

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection	Impervious gloves.
Eye protection	Safety glasses with side-shields.
Skin and body protection.	Lightweight protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains.

General Information

- Form Appearance Odor Boiling Point/Range Melting point/range Flash point Autoignition temperature Oxidizing properties Water solubility pH VALUE
- liquid No information available No information available °C no data available °C no data available °C no data available °C no data available No information available. soluble 8
- °F no data available

10. Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	No dangerous reaction known under conditions of normal use.
Hazardous decomposition	None under normal use
products	
Polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Acute toxicity

not hazardous

none
none

Target Organ Effects

May cause eye irritation with susceptible persons. May cause skin irritation in susceptible persons. May be harmful by inhalation. May be harmful if swallowed.

No known effects under normal use conditions.

12. Ecological information

Ecotoxicity effects Mobility Biodegradation Bioaccumulation No information available. No information available. Inherently biodegradable Does not bioaccumulate.

13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information		
IATA		
Proper shipping name	Not classified as dangerous in the meaning of transport regulations	
Hazard class	none	
Subsidiary Class	none	
Packing group	none	
UN-No	None	
15. Regulatory information		

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

U.S. State Regulations

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision

(M)SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 06/14/2019



1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code	R2355
Product name	Wash Buffer 2

Company/Undertaking Identification

Ocean NanoTech, LLC. 7964 Arjons Dr. Suite G San Diego, CA 92126 858-689-8808 info@oceannanotech.com

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification	
GHS - Classification	
Signal Word	not hazardous
Health Hazard	not hazardous
Physical Hazards	not hazardous
Principle Routes of Exposure/ Potential Health effects	
Eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
Inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.
Specific effects	
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects HMIS	No known effects under normal use conditions.
Health	0
Flammability	0
Reactivity	0
3. Composition/information on ingredients	

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First aid measures

Skin contact Eye contact	Rinse with plenty of water. If symptoms arise, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Water spray. Carbon dioxide (CO2). Foam. Dry chemical. **Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

	7. Handling and storage
Handling	Always wear recommended Personal Protective Equipment. No special handling advice required.
Storage	Keep in a dry, cool and well-ventilated place.
8. Exposure controls/personal protection	

Exposure limits

We are not aware of any national exposure limit.

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection	Impervious gloves.
Eye protection	Safety glasses with side-shields.
Skin and body protection.	Lightweight protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains.

General Information

- Form Appearance Odor Boiling Point/Range Melting point/range Flash point Autoignition temperature Oxidizing properties Water solubility pH VALUE
- liquid No information available No information available °C no data available °C no data available °C no data available °C no data available No information available. soluble 8
- °F no data available

10. Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	No dangerous reaction known under conditions of normal use.
Hazardous decomposition	None under normal use
products	
Polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Acute toxicity

not hazardous

Principle Routes of Exposure/	
Potential Health effects	
Eyes	none
Skin	none
Inhalation Ingestion	none
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity Sensitization	none

Target Organ Effects

May cause eye irritation with susceptible persons. May cause skin irritation in susceptible persons. May be harmful by inhalation. May be harmful if swallowed.

No known effects under normal use conditions.

12. Ecological information

Ecotoxicity effects Mobility Biodegradation Bioaccumulation No information available. No information available. Inherently biodegradable Does not bioaccumulate.

13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information	
IATA	
Proper shipping name	Not classified as dangerous in the meaning of transport regulations
Hazard class	none
Subsidiary Class	none
Packing group	none
UN-No	None
15. Regulatory information	

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

U.S. State Regulations

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision

(M)SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 06/14/2019



1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code Product name R2340 Wash Buffer 1

Company/Undertaking Identification

Ocean NanoTech, LLC. 7964 Arjons Dr. Suite G San Diego, CA 92126 858-689-8808 info@oceannanotech.com

For research use only. Not for human or animal therapeutic or diagnostic use.

2. Hazards identification

GHS - Classification

<u>Signal Word</u> WARNING



Health Hazard

Acute oral toxicity	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

Physical Hazards

Hazard statements

H302 - Harmful if swallowed H319 - Causes serious eye irritation

H315 - Causes skin irritation

Precautionary statements

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Principle Routes of Exposure/ Potential Health effects Eyes Skin Inhalation Ingestion	Irritating to eyes. Irritating to skin. May be harmful by inhalation. Harmful if swallowed.		
Specific effects			
Carcinogenic effects	none		
Mutagenic effects	none		
Reproductive toxicity	none		
Sensitization	none		
Target Organ Effects	none		
HMIS			
Health	2		
Flammability	0		
Reactivity	0		
	3. Composition/informat	ion on ingredients	
Chemical Name	CAS-No	EINECS-No	Weight %
Guanidine hydrochloride	50-01-1	200-002-3	<16
We recommend handling all chem	icals with caution	•	•

We recommend handling all chemicals with caution.

	4. First aid measures
Skin contact	Wash off immediately with plenty of water. If symptoms persist, call a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If eye irritation persists, consult a specialist.
Ingestion	Rinse mouth. Call a physician or Poison Control Centre immediately.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Special protective equipment for firefighters

Dry chemical. Water spray.

Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions Use personal protective equipment. Ensure adequate ventilation. **Methods for cleaning up** Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage

Handling Storage	Keen in property langued containers, keen in a dry, cool and well-ventilated				
8. Exposure controls/personal protection					
Exposure limits					
Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)	
Guanidine hydrochloride	none	none	none	none	
Engineering measures	Ensure ad	lequate ventilation, especi	ally in confined areas.		
	ipment requirements or each laboratory wh	are dependent on the use ere this material may be u insufficient ventilation wea	ised.		
Hand protection Eye protection Skin and body prot Hygiene measures	Eye protectionGoggles.Skin and body protection.Lightweight protective clothing.				
Environmental exposu controls		roduct from entering drain			
Concret Information	9. Ph	ysical and chemical pro	perties		
General Information					
Form	liquid				
Appearance	No information available				
Odor	No information available				
Boiling Point/Range		F no data			
Melting point/range	available a	vailable			
Flash point		F no data			
Autoignition temperature	°C no data ° available a °C no data °	vailable F no data vailable F no data vailable			
Oxidizing	No information ava				
properties	no data available				
Water	6.5				
solubility pH VALUE					
	10. Stabilit	y and			
	reactivity				

	11. Toxicological	
polymenzation	not occur.	
Stability Materials to avoid Hazardous decomposition products polymerization	Hazardous polymerization does	
	No information available.	
	No information available.	
	conditions.	
	Stable under normal	

information

Acute toxicity

Chemical Name	LD50 (oral,ra	t/mouse)	LD50 (dermal,rat/rab	bit) LC50 (i	nhalation,rat/mouse)
Guanidine hydrochloride	no data av	ailable	> 2000 mg/kg (Rabb	it) n	o data available
Principle Routes of Expe	osure/				
Potential Health effects	Irritating t	o eyes.			
Eyes	Irritating t	o skin.			
Skin	May be h	armful by			
Inhalation	inhalatior).			
Ingestion	Harmful i	f swallowed.			
Carcinogenic effects	none				
Mutagenic effects	none				
Reproductive toxicity	none none	none			
Sensitization	none				
Target Organ Effects	none				
	1:	2. Ecological inf	ormation		
Ecotoxicity offects	No inform	nation available			
Ecotoxicity effects	No information available. No information available.				
Mobility		ialion available.			
Biodegradation	No inform	nation available.			
Bioaccumulation	No inform	nation available.			
Chemical Name	Freshwater Algae	Water Flea Data	Freshwater Fish	Microtox Data	log Pow

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Guanidine hydrochloride 50-01-1					logPow<=-1.7

	13. Disposal considerations		
Dispose of in accordance with loo	Dispose of in accordance with local regulations.		
	14. Transport information		
IATA Proper shipping name Hazard class Subsidiary Class Packing group UN-No	Not classified as dangerous in the meaning of transport regulations none none none		

15. Regulatory information		
Component	TSCA	
Guanidine hydrochloride 50-01-1 (30-60)	Listed	

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) This product does not contains HAPs.

U.S. State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Guanidine hydrochloride	-	-	-	-	-
Tween 20	-	-	-	-	-

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

D2B Toxic materials



This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision

not applicable. (M)SDS sections updated.

For research use only. Not for human or animal therapeutic or diagnostic use.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE.

End of Safety Data Sheet

SAFETY DATA SHEET

Revision Date 06/14/2019



1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code	R0402
Product name	Digestion Buffer

Company/Undertaking Identification

Ocean NanoTech, LLC. 7964 Arjons Dr. Suite G San Diego, CA 92126 858-689-8808 info@oceannanotech.com

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2. Hazards identification		
GHS - Classification		
Signal Word	not hazardous	
Health Hazard	not hazardous	
Physical Hazards	not hazardous	
Principle Routes of Exposure/ Potential Health effects Eyes Skin Inhalation Ingestion Specific effects Carcinogenic effects	May cause eye irritation with susceptible persons. May cause skin irritation in susceptible persons. May be harmful by inhalation. May be harmful if swallowed.	
Mutagenic effects	none	
Reproductive toxicity Sensitization	none	
Target Organ Effects HMIS	No known effects under normal use conditions.	
Health	0	
Flammability	0	
Reactivity	0	
	3. Composition/information on ingredients	

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

4. First aid measures

Skin contact Eye contact	Rinse with plenty of water. If symptoms arise, call a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media Water spray. Carbon dioxide (CO2). Foam. Dry chemical. **Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions	Use personal protective equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage		
Handling	Always wear recommended Personal Protective Equipment. No special handling advice required.	
Storage	Keep in a dry, cool and well-ventilated place.	
8. Exposure controls/personal protection		

Exposure limits

We are not aware of any national exposure limit.

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
Hand protection	Impervious gloves.
Eye protection	Safety glasses with side-shields.
Skin and body protection.	Lightweight protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains.

General Information

- Form Appearance Odor Boiling Point/Range Melting point/range Flash point Autoignition temperature Oxidizing properties Water solubility pH VALUE
- liquid No information available No information available °C no data available °C no data available °C no data available °C no data available No information available. soluble 8
- °F no data available

10. Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	No dangerous reaction known under conditions of normal use.
Hazardous decomposition	None under normal use
products	
Polymerization	Hazardous polymerization does not occur.

11. Toxicological information

Acute toxicity

not hazardous

Principle Routes of Exposure/	
Potential Health effects	
Eyes	none
Skin	none
Inhalation Ingestion	none
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity Sensitization	none

Target Organ Effects

May cause eye irritation with susceptible persons. May cause skin irritation in susceptible persons. May be harmful by inhalation. May be harmful if swallowed.

No known effects under normal use conditions.

12. Ecological information

Ecotoxicity effects Mobility Biodegradation Bioaccumulation No information available. No information available. Inherently biodegradable Does not bioaccumulate.

13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information		
IATA		
Proper shipping name	Not classified as dangerous in the meaning of transport regulations	
Hazard class	none	
Subsidiary Class	none	
Packing group	none	
UN-No	None	
15 Regulatory information		

U.S. Federal Regulations

SARA 313

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contains HAPs.

U.S. State Regulations

California Proposition 65

This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision

(M)SDS sections updated.

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End of Safety Data Sheet