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	**F0302**
Product name	**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

Health	0
Flammability	0
Reactivity	0

SECTION 3: Composition/information on Ingredients

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

Reference to other sections See 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 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	suspension	
Odor	No data available	
Melting point / melting range	**°C** Mixture has not been tested	**°F** Mixture has not been tested
Boiling point / boiling range	**°C** Mixture has not been tested	**°F** Mixture has not been tested
Flash point	**°C** Mixture has not been tested	**°F** Mixture has not been tested
Autoignition Temperature	**°C** Mixture has not been tested	**°F** Mixture has not been tested
Decomposition temperature	**°C** Mixture has not been tested	**°F** Mixture has not been tested
Evaporation rate	No data available	

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: n-octanol/water	No data available
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

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
Aspiration hazard	Conclusive but not sufficient for classification

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 a vPvB.

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 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.

Chemical Name CAS-No Weight % SARA 313 - Threshold Values 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 revision	SDS sections updated.
Revision number	1.0
Revision date	18-Feb-2019

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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

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	Irritating to eyes.
Skin	Irritating to skin.
Inhalation	May be harmful by inhalation. Harmful if swallowed.
Ingestion	

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 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 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 Dry chemical. Water spray.

Special protective equipment for firefighters 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 Always wear recommended Personal Protective Equipment.

Storage 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 Impervious gloves.

Eye protection Goggles.

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.

9. Physical and chemical properties

General Information

Form	liquid	
Appearance	No information available	
Odor	No information available	
Boiling Point/Range	**°C** no data available	**°F** no data available
Melting point/range	**°C** no data available	**°F** no data available
Flash point	**°C** no data available	**°F** no data available
Autoignition temperature	**°C** no data available	**°F** no data available
	°C no data available	**°F** no data available
Oxidizing properties	No information available.	
	no data available	
Water solubility	6.5	
pH VALUE		

10. Stability and reactivity

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

11. Toxicological information

Acute toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Guanidine hydrochloride	no data available	> 2000 mg/kg (Rabbit)	no data available
Tween 20	= 36700 µL/kg (Rat)	no data available	no data available

Principle Routes of Exposure/ Potential Health effects

	Irritating to eyes.
Eyes	Irritating to skin.
Skin	May be harmful by inhalation.
Inhalation	Harmful if swallowed.
Ingestion	
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects	none

12. Ecological information

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	No information available.
Bioaccumulation	No information available.

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

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 none

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.

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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 **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

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 No known effects under normal use conditions.

HMIS

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	Rinse with plenty of water. If symptoms arise, call a physician.
Eye contact	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.

9. Physical and chemical properties

General Information

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

10. Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	None under normal use
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	No information available.
Mobility	No information available.
Biodegradation	Inherently biodegradable
Bioaccumulation	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 No known effects under normal use conditions.

HMIS

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	Rinse with plenty of water. If symptoms arise, call a physician.
Eye contact	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.

9. Physical and chemical properties

General Information

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

10. Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	None under normal use
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	No information available.
Mobility	No information available.
Biodegradation	Inherently biodegradable
Bioaccumulation	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 **R2340**
Product name **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

Signal Word
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 Irritating to eyes.

Eyes	Irritating to skin.
Skin	May be harmful by inhalation. Harmful if swallowed.
Inhalation	
Ingestion	

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 ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Guanidine hydrochloride	50-01-1	200-002-3	<16

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 Dry chemical. Water spray.
Special protective equipment for firefighters 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	Always wear recommended Personal Protective Equipment.
Storage	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

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	Goggles.
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.

9. Physical and chemical properties

General Information

Form	liquid	
Appearance	No information available	
Odor	No information available	
Boiling Point/Range	**°C** no data available	**°F** no data available
Melting point/range	**°C** no data available	**°F** no data available
Flash point	**°C** no data available	**°F** no data available
Autoignition temperature	**°C** no data available	**°F** no data available
	°C no data available	**°F** no data available
Oxidizing properties	No information available.	
	no data available	
Water solubility	6.5	
pH VALUE		

10. Stability and reactivity

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

11. Toxicological information

Acute toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Guanidine hydrochloride	no data available	> 2000 mg/kg (Rabbit)	no data available

Principle Routes of Exposure/ Potential Health effects

Eyes	Irritating to eyes.
Skin	Irritating to skin.
Inhalation	May be harmful by inhalation.
Ingestion	Harmful if swallowed.
Carcinogenic effects	none
Mutagenic effects	none
Reproductive toxicity	none
Sensitization	none
Target Organ Effects	none

12. Ecological information

Ecotoxicity effects	No information available.
Mobility	No information available.
Biodegradation	No information available.
Bioaccumulation	No information available.

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

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 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.

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End of Safety Data Sheet