

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
Ingestion	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 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

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 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 °F no data
Melting point/range	available available
Flash point	°C no data °F no data
Autoignition temperature	available available
	°C no data °F no data
	available available
	°C no data °F no data
	available 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

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
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