

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 R1226
Product name Lysis/Binding Buffer

Company/Undertaking Identification

Ocean NanoTech, LLC.
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SECTION 2: Hazards identification

GHS - Classification

Signal Word

DANGER



Health hazards

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Specific target organ systemic toxicity (single exposure)	Category 3

Physical hazards

Not Hazardous

Hazard Statements

H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H335 - May cause respiratory irritation
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Principle Routes of Exposure

Potential Health Effects

eyes Skin

inhalation Ingestion

Causes burns.

Harmful in contact with skin.

May be harmful by inhalation.

Harmful if swallowed.

Specific effects

Carcinogenic effects

Mutagenic effects

Reproductive toxicity

Sensitization

None

None

None

None

Target Organ Effects

None under normal use conditions

HMIS

Health	2
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Thiocyanic acid, compound with guanidine (1:1)	593-84-0	209-812-1	< 60
Nonionic surfactants	-	Not Listed	< 20

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact

Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing and wash it before reuse. Immediate medical attention is required.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Ingestion

Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

inhalation

Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately.

Notes to Physician

Treat symptomatically.

SECTION 5: Firefighting 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.

SECTION 6: Accidental release measures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment.
Methods for cleaning up Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling Always wear recommended Personal Protective Equipment. No special handling advices are necessary.
Storage Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Thiocyanic acid, compound with guanidine (1:1)	None	None	None	None
Nonionic surfactants	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. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

General information

Form	Liquid	
Appearance	No information available	
Odor	odorless	
Odor Threshold	Mixture has not been tested	
Boiling point / boiling range	°C No data available	°F No data available
Melting point / melting 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	Mixture has not been tested	
Water solubility	soluble	
Viscosity	Mixture has not been tested	
PH Range	4-6	

SECTION 10: Stability and reactivity

Stability	Stable under normal conditions. Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.
Materials to avoid	Strong oxidizing agents. Strong acids. Cyanide compounds. sodium hypochlorite.
Hazardous decomposition products	Carbon oxides, Nitrogen Oxides. Sulphur oxides.
polymerization	None under normal processing.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Thiocyanic acid, compound with guanidine (1:1)	593 mg/kg	No data available	No data available
Nonionic surfactants	= 1800 mg/kg (Rat)	No data available	No data available

Principle Routes of Exposure Potential Health Effects

eyes	Causes burns
Skin	Harmful in contact with 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 under normal use conditions

SECTION 12: Ecological information

Ecotoxicity	No information available
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 3
Mobility	No information available
Biodegradation	No information available
Bioaccumulation	No information available

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name	No dangerous good in sense of these transport regulations
Hazard Class	None
Subsidiary class	None
Packing group	None
UN-No	none

SECTION 15: Regulatory information

Component	TSCA
Thiocyanic acid, compound with guanidine (1:1) 593-84-0 (30-60)	Listed
Nonionic surfactants (10-20)	Listed

US 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.

US State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Thiocyanic acid, compound with guanidine (1:1)	-	-	-	-	-
Nonionic surfactants	-	-	-	-	-

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2B - Toxic materials



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.

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

"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