

Safety Data Sheet (SDS) Report

Applicant: WUXI NEST BIOTECHNOLOGY CO.,LTD

NO.530 XIDA Road, Wuxi Meicun Industrial Park, Jiangsu province, China

SDS number: WUXH00098186

Issue Date:

2020-03-09

Sample Description:

The sample information was submitted and identified on client's behalf to be:

Product Name : Disposable sampler
Physical State : Liquid attaches to solid

Data Received : Mar 03, 2020
Data Reviewed : Mar 09, 2020

Service Requested:

Based on the information provided by the applicant, the Safety Data Sheet (SDS) was generated in accordance with requirements of OSHA HazCom Standard (2012), for details please refer to attached pages..

Authorized By:

On Behalf Of Regulatory Affairs in Intertek Testing Services Ltd., Shanghai

Anna Wang

Regulatory Consultant

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Safety Data Sheet



Disposable sampler

WUXI NEST BIOTECHNOLOGY CO.,LTD

Version No:**1.0**According to OSHA HazCom Standard (2012) requirements

SDS number:WUXH00098186

Issue Date:09/03/2020 GHS.USA.EN

SECTION 1 IDENTIFICATION

Product Identifier

Product name	Disposable sampler
Other means of identification	NSM02

Recommended use of the chemical and restrictions on use

Relevant identified uses	Collection, transportation and storage of samples
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Supplier name	WUXI NEST BIOTECHNOLOGY CO.,LTD
Address	NO.530 XIDA Road, Wuxi Meicun Industrial Park, Jiangsu province, China
Telephone	0086-13814261600
Fax	0086-18352528192
Email	QAmanager00@nest-wuxi.com
Importer name	
Address	
Telephone	
Email	

Emergency phone number

Association / Organisation	
Emergency telephone numbers	

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Classified as Dangerous Goods for transport purposes.

Classification

Skin Corrosion/Irritation Category 1C, Acute Aquatic Hazard Category 3, Serious Eye Damage Category 1, Acute Toxicity (Oral) Category 4, Chronic Aquatic Hazard Category 3

Label elements

Hazard pictogram(s)





SIGNAL WORD

DANGER

Hazard statement(s)

H314	Causes severe skin burns and eye damage.	
H302	Harmful if swallowed.	
H412	Harmful to aquatic life with long lasting effects.	

Hazard(s) not otherwise classified

Not Applicable

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

P260	Oo not breathe mist/vapours/spray.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P270	Do not eat, drink or smoke when using this product.	
P273	Avoid release to the environment.	

Precautionary statement(s) Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P310	Immediately call a POISON CENTER or doctor/physician.	
P321	pecific treatment (see advice on this label).	
P363	Wash contaminated clothing before reuse.	
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	

Precautionary statement(s) Storage

P405 Store locked up.

Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
7732-18-5	34.191	water
593-84-0	29.55	guanidine thiocyanate
64-17-5	19.5	ethanol
3483-12-3	1.545	dithiothreitol
137-16-6	0.4	SODIUM LAUROYL SARCOSINATE
6858-44-2	0.294	sodium citrate
60-00-4	0.02	EDTA

SECTION 4 FIRST-AID MEASURES

Description of first aid measures		
Eye Contact	If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.	
Skin Contact	If skin or hair contact occurs: If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.	
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. 	
Ingestion	 For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. 	

▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. • Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.

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Disposable sampler

► Transport to hospital or doctor without delay.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Special hazards arising from the substrate or mixture

Fire Incompatibility

None known.

Special protective equipment and precautions for fire-fighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- ▶ Wear full body protective clothing with breathing apparatus.

Fire/Explosion Hazard

WARNING: In use may form flammable/ explosive vapour-air mixtures.

► Combustible.

▶ Slight fire hazard when exposed to heat or flame.

Combustion products include:

carbon monoxide(CO)

carbon dioxide (CO2)

other pyrolysis products typical of burning organic material.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material. Check regularly for spills and leaks. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

i recautions for sale narrating	
Safe handling	 Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. DO NOT allow clothing wet with material to stay in contact with skin
Other information	 Store in original containers. Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container	 ▶ Lined metal can, lined metal pail/ can. ▶ Plastic pail. 	
Storage incompatibility	 Avoid oxidising agents, acids, acid chlorides, acid anhydrides, chloroformates. Avoid strong bases. 	

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US NIOSH Recommended Exposure Limits (RELs)	ethanol	Alcohol, Cologne spirit, Ethanol, EtOH, Grain alcohol	1000 ppm / 1900 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	ethanol	Ethanol	Not Available	1000 ppm	Not Available	TLV® Basis: URT irr
US OSHA Permissible Exposure Levels (PELs) - Table Z1	ethanol	Ethyl alcohol (Ethanol)	1000 ppm / 1900 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
guanidine thiocyanate	Thiocyanic acid, compound with guanidine (1:1); (Guanidine thiocyanate salt)	0.98 mg/m3	11 mg/m3	65 mg/m3
ethanol	Ethanol: (Ethyl alcohol)	Not Available	Not Available	15000* ppm
sodium citrate	Trisodium citrate	9.3 mg/m3	100 mg/m3	610 mg/m3
EDTA	Ethylenediaminetetraacetic acid; (EDTA)	4.1 mg/m3	45 mg/m3	200 mg/m3

Ingredient	Original IDLH	Revised IDLH
ethanol	3,300 ppm	Not Available

Exposure controls

Exposure controls	
Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.
Personal protection	
Eye and face protection	 Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure. Chemical goggles.whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted.
Skin protection	See Hand protection below
Hands/feet protection	 Elbow length PVC gloves When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.
Body protection	See Other protection below
Other protection	► Overalls. ► PVC Apron.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Colorless liquid attaches to the inner wall of the tube		
Physical state	Colorless liquid attaches to the inner wall of the tube	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Available
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Flammable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available

Solubility in water	Not Available	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	▶ Product is considered stable under normal use conditions.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

information on toxicological el	ieus
	guanidine thiocyanate
	Oral (rat) LD50:593 mg/kg bw ^[1]
	dithiothreitol
	acute toxicitypoint estimates Oral: 500mg/Kg
Acute Toxicity	sodium citrate
	dermal (rat) LD50: >2000 mg/kg ^[1]
	Oral (rat) LD50: 6500-12100 mg/kg ^[2]
	EDTA
	Oral (rat) LD50: 2000 mg/kg ^[2]
Skin corrosion/irritation	guanidine thiocyanate
	Skin: adverse effect observed (corrosive) ^[1]
Serious eye damage/irritation	Causes severe eye damage.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Legend:	Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Disposable sampler	Harmful to aquatic life. Harmful to aquatic life with long lasting effects.				
guanidine thiocyanate	ENDPOINT LC50	TEST DURATION (HR)	SPECIES Fish	VALUE ca.89.1mg/L	SOURCE 2
	EC50	48	Crustacea	42.4mg/L	2
	EC50	72	Algae or other aquatic plants	130mg/L	2
<u> </u>		######################################			

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
dithiothreitol	LOW	LOW
SODIUM LAUROYL SARCOSINATE	LOW	LOW
EDTA	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
ethanol	LOW (LogKOW = -0.31)
dithiothreitol	LOW (LogKOW = -0.477)
SODIUM LAUROYL SARCOSINATE	MEDIUM (LogKOW = 4.0996)
EDTA	LOW (BCF = 123)

Mobility in soil

Ingredient	Mobility
ethanol	HIGH (KOC = 1)
dithiothreitol	HIGH (KOC = 1)
SODIUM LAUROYL SARCOSINATE	LOW (KOC = 434.3)
EDTA	LOW (KOC = 1046)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

- ► Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area

Product / Packaging disposal

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- ► Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

SECTION 14 TRANSPORT INFORMATION

Marine Pollutant

Land transport (DOT)		
UN number	3244	
UN proper shipping name	Solids containing corrosive liquid, n.o.s. (contains guanidine thiocyanate)	
Transport hazard class(es)	Class 8 Subrisk Not Applicable	
Packing group		
Environmental hazard	Not Applicable	
Special precautions for user	Hazard Label 8 Special provisions 49, IB5, T3, TP33	

Air transport (ICAO-IATA / DGR)

UN number	3244	
UN proper shipping name	Solids containing corrosive liquid, n.o.s. * (contains guanidine thiocyanate)	
Transport hazard class(es)	ICAO/IATA Class 8 ICAO / IATA Subrisk Not Applicable ERG Code 8L	
Packing group	II	
Environmental hazard	Not Applicable	

	Special provisions	A77
	Cargo Only Packing Instructions	863
	Cargo Only Maximum Qty / Pack	50 kg
Special precautions for user	Passenger and Cargo Packing Instructions	859
	Passenger and Cargo Maximum Qty / Pack	15 kg
	Passenger and Cargo Limited Quantity Packing Instructions	Y844
	Passenger and Cargo Limited Maximum Qty / Pack	5 kg

Sea transport (IMDG-Code / GGVSee)

UN number	3244	
UN proper shipping name	SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S. (contains guanidine thiocyanate)	
Transport hazard class(es)	IMDG Class 8 IMDG Subrisk Not Applicable	
Packing group	II	
Environmental hazard	Not Applicable	
Special precautions for user	EMS Number F-A , S-B Special provisions 218 274 Limited Quantities 1 kg	

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

WATER IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

GUANIDINE THIOCYANATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US DOE Temporary Emergency Exposure Limits (TEELs)

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

 ${\tt US\ TSCA\ Chemical\ Substance\ Inventory\ -\ Interim\ List\ of\ Active\ Substances}$

ETHANOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Alaska Limits for Air Contaminants

US - California Permissible Exposure Limits for Chemical Contaminants

US - Hawaii Air Contaminant Limits

US - Idaho - Limits for Air Contaminants

US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

US - Michigan Exposure Limits for Air Contaminants

US - Minnesota Permissible Exposure Limits (PELs)

US - Oregon Permissible Exposure Limits (Z-1)

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants

US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants

US - Washington Permissible exposure limits of air contaminants

US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants

US ACGIH Threshold Limit Values (TLV)

US AIHA Workplace Environmental Exposure Levels (WEELs)

US DOE Temporary Emergency Exposure Limits (TEELs)

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US TSCA Chemical Substance Inventory - Interim List of Active Substances

DITHIOTHREITOL IS FOUND ON THE FOLLOWING REGULATORY LISTS

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

SODIUM LAUROYL SARCOSINATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances

SODIUM CITRATE IS FOUND ON THE FOLLOWING REGULATORY LISTS

US DOE Temporary Emergency Exposure Limits (TEELs)

US EPA Carcinogens Listing

US List of Active Substances Exempt from the TSCA Inventory Notifications (Active-Inactive) Rule

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory US TSCA Chemical Substance Inventory - Interim List of Active Substances

EDTA IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Idaho Toxic Air Pollutants Non- Carcinogenic Increments - Occupational Exposure Limits

US - Washington Permissible exposure limits of air contaminants

US CWA (Clean Water Act) - List of Hazardous Substances US DOE Temporary Emergency Exposure Limits (TEELs) US EPCRA Section 313 Chemical List

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US TSCA Chemical Substance Inventory - Interim List of Active Substances US TSCA Section 5(a)(2) - Significant New Use Rules (SNURs)

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Flammable (Gases, Aerosols, Liquids, or Solids)	No
Gas under pressure	
Explosive	No
Self-heating	No
Pyrophoric (Liquid or Solid)	No
Pyrophoric Gas	No
Corrosive to metal	No
Oxidizer (Liquid, Solid or Gas)	No
Organic Peroxide	No
Self-reactive	No
In contact with water emits flammable gas	No
Combustible Dust	No
Carcinogenicity	No
Acute toxicity (any route of exposure)	Yes
Reproductive toxicity	No
Skin Corrosion or Irritation	Yes
Respiratory or Skin Sensitization	No
Serious eye damage or eye irritation	Yes
Specific target organ toxicity (single or repeated exposure)	No
Aspiration Hazard	
Germ cell mutagenicity	No
Simple Asphyxiant	
Hazards Not Otherwise Classified	

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

Name	Reportable Quantity in Pounds (lb)	Reportable Quantity in kg
Ethylenediamine-tetraacetic acid (EDTA)	5000	2270

State Regulations

US. CALIFORNIA PROPOSITION 65

None Reported

SECTION 16 OTHER INFORMATION

Initial Date 09/03/2020

Other information

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index