

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

Identification of the substance or mixture

Product code 15535016
Product name Guanidine Isothiocyanate

Company/undertaking identification

Life Technologies Corporation
 5781 Van Allen Way
 PO Box 6482
 Carlsbad, CA 92008
 +1 760 603 7200

Life Technologies
 5250 Mainway Drive
 Burlington, ONT
 CANADA L7L 6A4
 800/263-6236

24 hour Emergency Response: 866-536-0631
 301-431-8585
 Outside of the U.S. +1-301-431-8585

Country specific Emergency Number (if available):
 CHEMTREC Brazil (Rio De Janeiro) +(55)-2139581449 (português)

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

SECTION 2: Hazards identification

GHS - Classification

Signal Word
 WARNING



Health hazards

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

Physical hazards

Not Hazardous

Hazard Statements

H302 - Harmful if swallowed

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H412 - Harmful to aquatic life with long lasting effects
H402 - Harmful to aquatic life

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves/protective clothing/eye protection/face protection
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
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Principle Routes of Exposure

Potential Health Effects

eyes Irritating to eyes.
Skin Harmful in contact with skin.
inhalation May be harmful by inhalation.
Ingestion Harmful if swallowed.

Specific effects

Carcinogenic effects None.
Mutagenic effects None.
Reproductive toxicity None.
Sensitization None.

Target Organ Effects None under normal use conditions.

HMIS

Health	2
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
Thiocyanic acid, compound with guanidine (1:1) 593-84-0 (98-100)	593-84-0	209-812-1	98-100

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.

Most important symptoms and effects, both acute and delayed
 H302 - Harmful if swallowed, H315 - Causes skin irritation, H319 - Causes serious eye irritation, H335 - May cause respiratory irritation, H412 - Harmful to aquatic life with long lasting effects, H402 - Harmful to aquatic life

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.

Specific hazards arising from the chemical Not known

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

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
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Oxidizing properties	Mixture has not been tested	
Water solubility	soluble	
Upper explosion limit	No data available	
Lower explosion limit	No data available	
Partition coefficient: n-octanol/water	No data available	
Vapor Pressure	No data available	
vapor density	No data available	
Viscosity	Mixture has not been tested	
pH value	No data available	

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.
Possibility of hazardous reactions	Hazardous reaction has not been reported
Hazardous decomposition products	Carbon oxides, Nitrogen Oxides. Sulphur oxides.
polymerization	None under normal processing.
Conditions to avoid	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	593 mg/kg	No data available	No data available

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guanidine (1:1)			
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Principle Routes of Exposure

Potential Health Effects

eyes	Irritating to eyes.
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	Hazardous to the Aquatic Environment.
Acute aquatic toxicity	Category 3.
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
Environmental hazards	None

SECTION 15: Regulatory information

Component	US TSCA
Thiocyanic acid, compound with guanidine (1:1) 593-84-0 (98-100)	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

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

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