

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

Identification of the substance or mixture

Product code 4331348
Product name Dye Labeled Oligonucleotide Assays

Company/undertaking identification

Life Technologies
5791 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

DANGER



Health hazards

Carcinogenicity	Category 2
Reproductive Toxicity	Category 1B

Physical hazards

Not Hazardous

Hazard Statements

H360 - May damage fertility or the unborn child if swallowed

H351 - Suspected of causing cancer if swallowed

Precautionary Statements

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P202 - Do not handle until all safety precautions have been read and understood

P201 - Obtain special instructions before use

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

P405 - Store locked up

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 cause irritation of respiratory tract.
Ingestion	May be harmful if swallowed.

Specific effects

Carcinogenic effects	This product contains one or more substances which are classified as carcinogenic, mutagenic and/or reprotoxic.
Mutagenic effects	Not Applicable
Reproductive toxicity	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility
Sensitization	Not Applicable
Target Organ Effects	No known effects under normal use conditions

HMIS

Health	2 * Chronic Hazard
Flammability	1
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Formamide	75-12-7	200-842-0	0.1-1.0

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact	Wash off immediately with plenty of water. In the case of skin irritation or allergic reactions see a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Call a physician if irritation persists.
Ingestion	Rinse mouth. Consult a physician if necessary. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. Consult a physician if necessary.
Notes to Physician	Treat symptomatically.

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SECTION 5: Firefighting measures

Suitable extinguishing media	Foam. Dry powder. Dry chemical. Carbon dioxide (CO ₂). Water.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions	Avoid exposure to vapor. Avoid breathing vapors or mists. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

Environmental precautions

Should not be released into the environment. Prevent product from entering drains.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling	Always wear recommended Personal Protective Equipment. Avoid contact with skin, eyes or clothing. Use only in ventilated areas.
Storage	Store locked up. Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place. Keep away from combustible material.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Formamide	37 mg/m ³	None	10 ppm	None

<u>Engineering measures</u>	Ensure adequate ventilation, especially in confined areas.
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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	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Lightweight protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

<u>Environmental exposure controls</u>	Should not be released into the environment. Prevent product from entering drains.
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SECTION 9: Physical and chemical properties

General information

Form	Liquid	
Appearance	colorless	
Odor	Mixture has not been tested	
Odor Threshold	Mixture has not been tested	
Boiling point / boiling range	°C 100-210	°F 212-410
Melting point / melting range	°C 0-2.5	°F 32-36.5
flash point	°C >120	°F >248
Autoignition Temperature	°C >500	°F >932
Oxidizing properties	Mixture has not been tested	
Water solubility	soluble	
Viscosity	Mixture has not been tested	

SECTION 10: Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	Strong oxidizing agents. Acids. Bases. Sulphur trioxide. Iodine.
Hazardous decomposition products	Hydrogen cyanide (hydrocyanic acid). Nitrogen oxides (NOx). Ammonia. Carbon monoxide.
polymerization	Hazardous polymerization does not occur.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mouse)
Formamide	3200 mg/kg	13500 mg/kg	3900 ppm/6H

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 cause irritation of respiratory tract
Ingestion	May be harmful if swallowed
Carcinogenic effects	This product contains one or more substances which are classified as carcinogenic, mutagenic and/or reprotoxic.
Mutagenic effects	No information available
Reproductive toxicity	May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.
Sensitization	No information available

SECTION 12: Ecological information

Ecotoxicity	Daphnia magna
Mobility	see log Pow

**Biodegradation
Bioaccumulation**Readily biodegradable
Material does not bioaccumulate

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Formamide	Desmodesmus subspicatus EC50>500 mg/L (96 h) Desmodesmus subspicatus EC50>500 mg/L (72 h)	Daphnia magna EC50>500 mg/L (48 h)			logPow-0.82

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
Formamide 75-12-7 (0.1-1.0)	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
Formamide	Listed	Listed	Listed	-	Listed

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2A - Very 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

Not Applicable. SDS sections updated.

For research use only.

"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