Safety Data Sheet

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

Identification of the substance or mixture

Product code S33102
Product name SYBR Safe® DNA gel stain

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

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
Not Hazardous

Physical hazards

GHS Physical Hazard 1	Flammable liquids
GHS Physical Hazard Category Number	Category 4

Hazard Statements
H227 - Combustible liquid

Precautionary Statements
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P370 + P378 - In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction

Principle Routes of Exposure

Potential Health Effects

eyes	Mild eye irritation.
Skin	Mild skin irritation. Components of the product may be absorbed into the body through the skin.

Specific effects

Carcinogenic effects	None
Mutagenic effects	Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.
Reproductive toxicity	None
Sensitization	No sensitization responses were observed
Target Organ Effects	No known effects under normal use conditions

HMIS

Health	1
Flammability	2
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
dimethylsulfoxide	67-68-5	200-664-3	95-100

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Skin contact	Wash off immediately with plenty of water. If symptoms occur, obtain medical advice.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if necessary.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to Physician	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO_2). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use personal protection equipment.

Methods for cleaning up Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling Avoid contact with skin and eyes. Always wear reccommended Personal Protective Equipment.

Storage Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Do not store near combustible materials. 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)
dimethylsulfoxide	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 butyl rubber gloves. Nitrile gloves are not recommended. Some brands of Nitrile gloves have breakthrough times of five minutes.

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.

Environmental exposure controls Prevent product from entering drains.

SECTION 9: Physical and chemical properties

General information

Form	Liquid	
Appearance	No information available	
Odor	No information available	
Boiling point / boiling range	**°C** 188 - 190	**°F** 370 - 374
Melting point / melting range	**°C** 18 - 19	**°F** 64.4 - 66.2
flash point	**°C** 87 - 89	**°F** 188.6 - 192.2
Autoignition Temperature	**°C** 214 - 216	**°F** 417.2 - 420.8
Oxidizing properties	No information available	
Water solubility	miscible	

Upper explosion limit	61% - 64%
Lower explosion limit	2.4% - 2.8%
PH Range	6-8

SECTION 10: Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	Strong acids. Strong oxidizing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. Sulphur oxides. Carbon oxides.
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)
dimethylsulfoxide	14500 mg/kg Oral LD50	>40000 mg/kg bw	>5000 mg/l

Principle Routes of Exposure

Potential Health Effects

eyes	Mild eye irritation
Skin	Mild skin irritation Components of the product may be absorbed into the body through the skin.
inhalation	No information available
Ingestion	No information available
Carcinogenic effects	None
Mutagenic effects	Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.
Reproductive toxicity	None.
Sensitization	No sensitization responses were observed

SECTION 12: Ecological information

Ecotoxicity	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
Mobility	completely soluble
Biodegradation	Inherently biodegradable
Bioaccumulation	Material does not bioaccumulate

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
dimethylsulfoxide					logPow-2.03

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
dimethylsulfoxide 67-68-5 (95-100)	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

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
dimethylsulfoxide	-	-	-	-	-

California Proposition 65
This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

B3 - Combustible liquid

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