



Safety Data Sheet

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

Identification of the substance or mixture

Product code T3604
Product name TOTO®-3 iodide (642/660) *1 mM solution in DMSO*

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)

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SECTION 2: Hazards identification

GHS - Classification

Signal Word
None

Health hazards
Not Hazardous

Physical hazards

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

Hazard Statements
H227 - Combustible liquid

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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

None

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 (CO₂). Foam. Dry chemical.

Special protective equipment for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

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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 recommended 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 data available

Odor Threshold No data 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%	
Viscosity	No data available	
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	None
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

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dimethylsulfoxide					logPow-2.03
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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.

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End of Safety Data Sheet