

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

**Identification of the substance or mixture**

**Product code** 17919  
**Product name** TEMED (N,N,N',N'-Tetramethyl ethylenediamine)

**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

Thermo Fisher Scientific  
Pierce Biotechnology  
P.O. Box 117  
Rockford, IL 61105  
United States  
1.815.968.0747 or  
1.800.874.3723

**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)

**Use as laboratory reagent. Scientific research and development.**

SECTION 2: Hazards identification

**GHS - Classification**

**Signal Word**  
DANGER



**Health hazards**

Acute oral toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Skin corrosion/irritation	Category 1

**Revision date** 16-May-2016  
**Product code** 17919

**Product name** TEMED (N,N,N',N'-Tetramethyl ethylenediamine) **Page** 1 / 6

Serious eye damage/eye irritation	Category 1
-----------------------------------	------------

**Physical hazards**

GHS Physical Hazard 1	Flammable liquids
GHS Physical Hazard Category Number	Category 2

**Hazard Statements**

- H225 - Highly flammable liquid and vapor
- H301 - Toxic if swallowed
- H314 - Causes severe skin burns and eye damage
- H318 - Causes serious eye damage
- H331 - Toxic if inhaled

**Precautionary Statements**

**Prevention**

- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Response**

- P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
- P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Storage**

- P403 + P235 - Store in a well-ventilated place. Keep cool

**Disposal**

- P501 - Dispose of contents/ container to an approved waste disposal plant

**Principle Routes of Exposure**

**Potential Health Effects**

- eyes** Risk of serious damage to eyes.
- Skin** Causes burns.
- inhalation** Harmful by inhalation.
- Ingestion** Harmful if swallowed.
- Injection** May be harmful if injected.

**Specific effects**

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

**Target Organ Effects** None under normal use conditions.

**HMIS**

Health	4
Flammability	0
Reactivity	0

### SECTION 3: Composition/information on ingredients

Component	CAS-No	EINECS-No	Weight %
1,2-Bis(dimethylamino)ethane 110-18-9 ( 98-100 )	110-18-9	203-744-6	98-100

We recommend handling all chemicals with caution.

### SECTION 4: First aid measures

<b>Skin contact</b>	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.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Ingestion</b>	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.
<b>inhalation</b>	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**

H225 - Highly flammable liquid and vapor, H301 - Toxic if swallowed, H314 - Causes severe skin burns and eye damage, H318 - Causes serious eye damage, H331 - Toxic if inhaled

**Notes to Physician** Treat symptomatically.

### SECTION 5: Firefighting measures

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
<b>Special protective equipment for firefighters</b>	Wear self-contained breathing apparatus and protective suit.
<b>Specific hazards arising from the chemical</b>	Not known

### SECTION 6: Accidental release measures

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material.

#### **Environmental precautions**

No special environmental precautions required.

See Section 12 for more information.

### SECTION 7: Handling and storage

<b>Handling</b>	Always wear recommended Personal Protective Equipment. No special handling advices are necessary.
<b>Storage</b>	Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

### SECTION 8: Exposure controls/personal protection

#### **Exposure Limits**

Revision date 16-May-2016  
Product code 17919

Page 3 / 6  
Product name TEMED (N,N,N',N'-Tetramethyl ethylenediamine)

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
1,2-Bis(dimethylamino)ethane	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** 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** No special environmental precautions required.

## SECTION 9: Physical and chemical properties

### **General information**

<b>Form</b>	Liquid	
<b>Appearance</b>	No information available	
<b>Odor</b>	Mixture has not been tested	
<b>Odor Threshold</b>	Mixture has not been tested	
<b>Boiling point / boiling range</b>	°C No data available	°F No data available
<b>Melting point / melting range</b>	°C No data available	°F No data available
<b>flash point</b>	°C 20.85	°F 69.53
<b>Autoignition Temperature</b>	°C No data available	°F No data available
<b>Evaporation rate</b>	No data available	
<b>Flammability (solid, gas)</b>	No data available	
<b>Oxidizing properties</b>	Mixture has not been tested	
<b>Water solubility</b>	No data available	
<b>Upper explosion limit</b>	No data available	
<b>Lower explosion limit</b>	No data available	
<b>Partition coefficient: n-octanol/water</b>	No data available	
<b>Vapor Pressure</b>	No data available	
<b>vapor density</b>	No data available	
<b>Viscosity</b>	Mixture has not been tested	
<b>pH value</b>	>7	

## SECTION 10: Stability and reactivity

**Stability** Stable under normal conditions.

**Materials to avoid** No information available.

**Possibility of hazardous reactions** Hazardous reaction has not been reported

**Hazardous decomposition products** No information available.  
**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)
1,2-Bis(dimethylamino)ethane	= 268 mg/kg (Rat)	No data available	=1318ppm(Rat)

### Principle Routes of Exposure

#### Potential Health Effects

**eyes** Risk of serious damage to eyes.  
**Skin** Causes burns.  
**inhalation** Harmful by inhalation.  
**Ingestion** Harmful if swallowed.  
  
**Injection** May be harmful if injected.  
  
**Carcinogenic effects** None.  
**Mutagenic effects** None.  
**Reproductive toxicity** None.  
**Sensitization** None.  
  
**Target Organ Effects** None under normal use conditions

## SECTION 12: Ecological information

**Ecotoxicity** Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.  
**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** 1,2-Di-(Dimethylamino)ethane  
**Hazard Class** 3  
**Subsidiary class** None  
**Packing group** II  
**UN-No** UN2372  
**Environmental hazards** No

Revision date 16-May-2016  
Product code 17919

Page 5 / 6  
Product name TEMED (N,N,N',N'-Tetramethyl ethylenediamine)

## SECTION 15: Regulatory information

Component	US TSCA
1,2-Bis(dimethylamino)ethane 110-18-9 ( 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**

B2 - Flammable liquid

D1B - Toxic materials

E - Corrosive material



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.

Use as laboratory reagent. Scientific research and development.

"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**

Revision date 16-May-2016  
Product code 17919

Page 6 / 6  
Product name TEMED (N,N,N',N'-Tetramethyl ethylenediamine)