



# SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2022  
Date Updated: February 08, 2022

## SECTION 1. ----- PRODUCT AND COMPANY IDENTIFICATION-----

**Product Name** TEMED  
**Product Code(s)** TB0508  
**Recommended Use** For Laboratory Research Use Only  
Not for Human or Animal Drug Use  
**Synonyms** N,N,N,N'-Tetramethylethylenediamine

**Supplier** Bio Basic Inc.  
**Address** 20 Konrad Crescent, Markham, Ontario,  
Canada, L3R 8T4  
**Telephone** (905) 474 4493  
**Fax** (905) 474 5794  
**For Chemical Emergency Phone#** (416) 995 9730

## SECTION 2. ----- HAZARDS IDENTIFICATION -----

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin Corrosion/Irritation	Category 1 Sub-category B
Serious Eye Damage/Eye Irritation	Category 1
Flammable liquids	Category 2

### Label elements

#### Emergency Overview

**Danger**

**Hazard statements**  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H332 - Harmful if inhaled  
H225 - Highly flammable liquid and vapor

**Appearance** Clear

**Physical State** Liquid

**Odor** Amine-like

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating / lighting/ .? / equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician Specific treatment (see .? on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Call a POISON CENTER or doctor/physician if you feel unwell  
 Immediately call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth  
 Do NOT induce vomiting  
 In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information****SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----**

Chemical Name	EC No.	CAS-No	Weight %
1,2-Bis(dimethylamino)ethane	203-744-6	110-18-9	95-100

**SECTION 4. ----- FIRST-AID MEASURES -----****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**SECTION 5. ----- FIRE FIGHTING MEASURES -----**

**Conditions of flammability**

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

**Explosion data - sensitivity to mechanical impact**

No data available

**Explosion data - sensitivity to static discharge**

No data available

**Further information**

Use water spray to cool unopened containers.

**SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----**

**Personal precautions**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**SECTION 7. ----- HANDLING AND STORAGE-----**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----**

**Control parameters**

**Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
1,2-Bis(dimethylamino)ethane 110-18-9	-	-	-

**Appropriate engineering controls**

**Engineering Measures**                      Showers  
   Eyewash stations  
   Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                      Avoid contact with eyes. Safety glasses with side-shields.

**Skin and Body Protection**                Wear protective gloves/clothing.

**Respiratory Protection**                    If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**                         Handle in accordance with good industrial hygiene and safety practice.

**SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES -----**

**Appearance**

Form    liquid, clear

Colour    colourless

**Safety data**

pH    No data available

Melting point/freezing point              Melting point/range: -55 °C (-67 °F) - lit.

Boiling point                                 120 - 122 °C (248 - 252 °F) - lit.

Flash point                                    20 °C (68 °F) - closed cup

Ignition temperature                        No data available

Auto-ignition temperature                 No data available

Lower explosion limit                        0.98 %(V)

Upper explosion limit                        9.08 %(V)

Vapour pressure                              No data available

Density                                         0.775 g/cm<sup>3</sup> at 20 °C (68 °F)

Water solubility                              soluble

Partition coefficient:  
n-octanol/water                                log Pow: 0.3

Relative vapour density                      No data available

Odour    No data available

Odour Threshold                              No data available

Evaporation rate                              No data available

**SECTION 10. -----STABILITY AND REACTIVITY -----**

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Vapours may form explosive mixture with air.

**Conditions to avoid**

Heat, flames and sparks. Extremes of temperature and direct sunlight.

**Materials to avoid**

Strong oxidizing agents, Carbon dioxide (CO<sub>2</sub>), Copper

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>) Other decomposition products - No data available

**SECTION 11. ----- TOXICOLOGICAL INFORMATION -----**

**Acute toxicity**

**Oral LD50**

LD50 Oral - Rat - 268 mg/kg

**Inhalation LC50**

LC50 Inhalation - Rat - 4 h - 1318 ppm

**Dermal LD50**

LD50 Dermal - Rabbit - 5,390 mg/kg

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

Eyes - Rabbit - Severe eye irritation

**Respiratory or skin sensitisation**

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

<b>Inhalation</b>	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Ingestion</b>	Toxic if swallowed.
<b>Skin</b>	May be harmful if absorbed through skin. Causes skin burns. May be harmful if absorbed through skin. Causes skin burns.
<b>Eyes</b>	Causes eye burns.

**Signs and Symptoms of Exposure**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema

**Synergistic effects**

No data available

**Additional Information**

RTECS: KV7175000

**SECTION 12. ----- ECOLOGICAL INFORMATION -----**

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

No data available

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14. ----- TRANSPORT INFORMATION -----**

**DOT**

UN number: 2372 Class: 3 Packing group: II  
 Proper shipping name: 1,2-DI-(DIMETHYLAMINO)ETHANE

**IMDG**

UN number: 2372 Class: 3 Packing group: II  
 Proper shipping name: 1,2-DI-(DIMETHYLAMINO)ETHANE

**IATA**

UN number: 2372 Class: 3 Packing group: II  
 Proper shipping name: 1,2-Di-(dimethylamino) ethane

**SECTION 15. ----- REGULATORY INFORMATION -----**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

<b>Component</b>	<b>SARA 313 - Threshold Values %</b>
1,2-Bis(dimethylamino)ethane 110-18-9 ( 95-100 )	-

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**Clean Water Act**

<b>Chemical Name</b>	<b>CWA - Reportable Quantities</b>	<b>CWA - Toxic Pollutants</b>	<b>CWA - Priority Pollutants</b>	<b>CWA - Hazardous Substances</b>
1,2-Bis(dimethylamino)ethane 110-18-9	-	-	-	-

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

<b>Chemical Name</b>	<b>Hazardous Substances RQs</b>	<b>Extremely Hazardous Substances RQs</b>	<b>RQ</b>
1,2-Bis(dimethylamino)ethane 110-18-9	-	-	-

**U.S. State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
1,2-Bis(dimethylamino)ethane - 110-18-9	-

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,2-Bis(dimethylamino)ethane 110-18-9	X	-	-

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not regulated

**SECTION 16. ----- OTHER INFORMATION-----**

Further information: no limited for paper copy, just for internal uses.  
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

**Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**Issuing Date:** 08-February-2022

**End of SDS**





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## CERTIFICATE OF ANALYSIS

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Product	TEMED (N,N,N',N'-TETRAMETHYLETHYLENEDIAMINE)
Grade	Ultra Pure Grade
Product Code	TB0508
Mol. Formula	C <sub>6</sub> H <sub>16</sub> N <sub>2</sub>
Mol. Weight	116.21
CAS#	110-18-9
Lot	

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Test Items	Specifications	Results
Appearance	Clear liquid	
Purity	≥99.0%	
Refractive Index	1.417-1.419	
Boiling Range	119-121°C	

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Storage: RT.