Safety data sheet

ChemiPURE TEMED

Product name ChemiPURE TEMED	Catalog no. TMD025, TMD100
Synonyms TEMED; TMEDA; 1,2-Bis(dimethylamino)ethane	SDS revision -
CAS no. 110-18-9	Format version / date 3 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	ChemiPURE TEMED
Product code	TMD025, TMD100
CAS number	110-18-9
EC number	203-744-6
Recommended use	Research use only; catalyst for polyacrylamide gel polymerization in PAGE and SDS-PAGE.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. Ipekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10, Yakutiye, Erzurum, Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

Classification	Flam. Liq. 2; Acute Tox. 4 (oral); Acute Tox. 4 (inhalation); Skin Corr. 1B; Eye Dam. 1.
Label elements	GHS02, GHS05, GHS07; signal word: Danger.
Symbols / pictograms	
Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H332 Harmful if inhaled.
Precautionary statements - Prevention	P210 Keep away from heat, sparks and flames. No smoking. P233 Keep container closed. P261 Avoid inhalation. P280 Wear gloves, protective clothing and eye/face protection.
Precautionary statements - Response	P301+P330+P331 IF SWALLOWED: Rinse mouth; do NOT induce vomiting. P303+P361+P353 IF ON SKIN: Remove contaminated clothing; rinse skin. P305+P351+P338 IF IN EYES: Rinse with water. P310 Immediately call a POISON CENTER/doctor.
Other hazards	Flammable vapours may form explosive mixtures with air. Direct contact causes corrosive burns.

Composition & response

ChemiPURE TEMED | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	ChemiPURE TEMED
Synonyms	N,N,N',N'-Tetramethylethylenediamine; TMEDA
Concentration	≥99% (purity)
Formula	C6H16N2
Molecular weight	116.21 g/mol
Mixture statement	Substance: N,N,N',N'-tetramethylethylenediamine (CAS 110-18-9; EC 203-744-6), ≥99% purity.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse immediately with water for at least 15 minutes. Remove contact lenses if easy; seek urgent medical attention.
Skin contact	Remove contaminated clothing and flush skin with water for at least 15 minutes. Seek immediate medical attention.
Inhalation	Move to fresh air. Obtain urgent medical help if exposed or unwell; give assisted breathing only if trained.
Ingestion	Rinse mouth; do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor immediately.
Self-protection of first aider	Avoid breathing vapours or skin contact. Wear gloves and eye/face protection before assisting.
Most important symptoms / effects	Severe skin and eye burns; harmful if swallowed or inhaled. Vapour exposure may cause dizziness.
Notes to physicians	Treat symptomatically. Corrosive ingestion can injure the gastrointestinal tract; do not induce emesis.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Alcohol-resistant foam, dry powder, CO2 or water spray. Cool nearby containers with water spray.
Unsuitable extinguishing media	Avoid a high-pressure water jet; it may spread burning liquid.
Special hazards arising from the substance or mixture	Highly flammable vapours may form explosive mixtures and flash back. Burning releases carbon and nitrogen oxides.
Explosion data	Flash point approximately 21 °C; flammable limits about 1–9 vol% in air.
Advice for firefighters	Use self-contained breathing apparatus and full protective clothing. Cool exposed containers; keep runoff out of drains.

Safe use & protection

ChemiPURE TEMED | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Restrict access and remove all sources of ignition. Provide ventilation. Do not breathe vapours. Wear gloves, eye/face and suitable respiratory protection.
Environmental precautions	Prevent entry into drains, waterways and soil; contain spills and notify authorities when required.
Methods and materials for containment and cleaning up	Absorb with inert non-combustible absorbent (e.g. sand or vermiculite). Use non-sparking tools; collect in closed compatible containers for hazardous-waste disposal.
Reference to other sections	See Sections 8 and 13.

07 HANDLING AND STORAGE

Precautions for safe handling	Handle in a chemical fume hood. Keep away from heat, sparks, flames and static discharge; use non-sparking tools and suitable explosion-proof equipment. Avoid skin/eye contact and vapour inhalation.
Conditions for safe storage	Store tightly closed at 15–25 °C, protected from light and air, away from ignition sources and oxidizers. After opening, 2–8 °C is recommended; use flammable-liquid-rated cold storage.
Container labeling	Keep in original, correctly labelled, tightly closed compatible container. Store in a designated flammable-chemicals area.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No established workplace limit is stated for this reagent. Minimize inhalation exposure by working under effective local exhaust ventilation.

8.2 Exposure controls

Engineering measures	Use effective local exhaust or chemical fume hood; ensure explosion-proof ventilation where necessary. Provide eyewash and emergency shower.
Hygiene measures	Do not eat, drink or smoke. Wash hands after handling; remove and wash contaminated clothing before reuse.
Eye / face protection	Chemical splash goggles (EN 166) and full face shield where splash risk exists.
Hand protection	Chemical-resistant protective gloves selected for exposure and breakthrough time (EN 374); inspect before use.
Skin and body protection	Laboratory coat, chemical-resistant protective clothing/apron and closed footwear.
Respiratory protection	Where ventilation is insufficient or exposure occurs, use an appropriately fitted respirator with an organic-vapour filter (Type A); follow the local risk assessment.

Material properties

ChemiPURE TEMED | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colourless to pale-yellow liquid
Odor	Amine-like, strong odour
Odor threshold	No data available
pH	Approximately 8.0–8.5 (0.1 g/L aqueous solution, 20 °C)
Melting point / freezing point	Approximately −55 °C
Initial boiling point and boiling range	120–122 °C (760 mmHg)
Flash point	Approximately 21 °C
Evaporation rate	No data available
Flammability (solid, gas)	Highly flammable liquid (Category 2)
Upper / lower flammability or explosive limits	Upper approximately 9 vol%; lower approximately 1 vol%
Vapor pressure	No data available
Vapor density	Approximately 4.0 (air = 1)
Relative density	Approximately 0.77 g/mL
Solubility(ies)	Miscible with water
Partition coefficient: n-octanol / water	log Pow approximately 0.3
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	Vapours may form explosive mixtures with air
Oxidizing properties	Not classified as an oxidizer

10 STABILITY AND REACTIVITY

Reactivity	No unusual reactivity under normal use; reacts with strong oxidizing agents.
Chemical stability	Stable under recommended storage and handling conditions.
Possibility of hazardous reactions	Vapour-air mixtures may ignite or explode in the presence of an ignition source. Hazardous polymerization is not expected.
Conditions to avoid	Heat, hot surfaces, flames, sparks, electrostatic discharge, excess air/light exposure and incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide, carbon dioxide and nitrogen oxides upon combustion.

Health & environment

ChemiPURE TEMED | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Acute Tox. 4 (oral and inhalation), H302 and H332. Reported oral LD50 (rat): approximately 891 mg/kg.
Skin corrosion / irritation	Skin Corr. 1B (H314): causes severe skin burns.
Serious eye damage / eye irritation	Eye Dam. 1; causes serious eye damage, included in H314.
Carcinogenicity	No product-specific carcinogenicity data available.
Reproductive toxicity	No data available.
STOT - SE	No data available for classification. High vapour levels may irritate the respiratory tract.
STOT - RE	No data available.
Aspiration hazard	No data available.

11.2 Potential health effects

Ingestion: Harmful; can cause severe burns to the mouth and gastrointestinal tract.
Inhalation: Harmful; vapours may irritate or burn the respiratory tract.
Skin: Causes severe chemical burns.
Eyes: Causes severe damage and possible permanent injury.

11.3 Additional information

Immediate medical attention is required after exposure involving burns, significant inhalation or ingestion.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Do not allow release to waterways. Substance can affect aquatic organisms and water pH; complete-product ecotoxicity data are limited.
Persistence and degradability	Persistence is unlikely; no complete-product degradation data available.
Bioaccumulative potential	Bioaccumulation is unlikely (log Pow about 0.3).
Mobility in soil	Highly mobile due to water solubility.
Results of PBT and vPvB assessment	Not considered PBT or vPvB according to available assessments.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose of as hazardous flammable/corrosive laboratory chemical waste via an approved disposal service. Do not discharge into drains or mix with incompatible substances.
Contaminated packaging	Empty containers may retain flammable vapours and corrosive residue. Dispose of as hazardous waste and do not reuse.

Transport & reference

ChemiPURE TEMED | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Environmental hazards
ADR/RID	2372	1,2-DI-(DIMETHYLAMINO)ETHANE	3	II	No
IMDG	2372	1,2-DI-(DIMETHYLAMINO)ETHANE	3	II	No
IATA	2372	1,2-DI-(DIMETHYLAMINO)ETHANE	3	II	No

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP). Substance CAS 110-18-9; EC 203-744-6; Index 612-103-00-3.
Environmental hazards	Not classified as a marine pollutant for transport. Prevent environmental release.
Chemical safety assessment	No product-specific chemical safety assessment information available.

16 OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE	Specific Target Organ Toxicity - Single Exposure
STOT-RE	Specific Target Organ Toxicity - Repeated Exposure
PBT	Persistent Bioaccumulative and Toxic
vPvB	very Persistent very Bioaccumulative and toxic
ADR	European Agreement concerning the international carriage of Dangerous goods by Road
CAS	Chemical Abstracts Service
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime code for Dangerous Goods
REACH	Registration, Evaluation, Authorization and restriction of Chemicals
RID	Regulations concerning the International transport of Dangerous goods by rail