Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

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

· **1.1 Product identifier**

· **Trade name: TEMED**

· **Article number:** 20-3000-25
· **CAS Number:**
110-18-9
· **EC number:**
203-744-6
· **Index number:**
612-103-00-3
· **Registration number** 01-2120783605-46
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
· **Sector of Use** SU1 Agriculture, forestry, fishery
· **Product category** PC21 Laboratory chemicals
· **Application of the substance / the mixture** Laboratory chemical
· **Uses advised against**
Processes involving extreme heat use advised against.
Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).
Any use involving significant release of dust, vapour or mist in the breathing zone of workers where they are exposed without suitable respiratory protective equipment (RPE).
The product is stictly intended for industrial or professional use only.

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Severn Biotech Ltd.
Unit 2,
Park Lane,
Kidderminster,
Worcestershire.
DY11 6TJ
UK
Tel: 0044 1562 825286
Fax: 0044 1562 825284
email: info@severnbiotech.com

· **Further information obtainable from:** Product safety department.
· **1.4 Emergency telephone number:**
UK National Poisons Information Service. E-mail: npis.birmingham@nhs.net; Tel: +44 (0)344 892 0111

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**


flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.


corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Acute Tox. 4 H302 Harmful if swallowed.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 1)

Acute Tox. 4 H332 Harmful if inhaled.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
· **Hazard pictograms** GHS02, GHS05, GHS07
· **Signal word** Danger
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H302+H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
· **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.1 Chemical characterisation: Substances**
· **CAS No. Description**
110-18-9 N,N,N',N'-tetramethylethylenediamine
· **Identification number(s)**
· **EC number:** 203-744-6
· **Index number:** 612-103-00-3

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:**
DO NOT DELAY!
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:**
DO NOT DELAY!
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:**
DO NOT DELAY!

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 2)

Drink plenty of water and provide fresh air. Call for a doctor immediately.
Do not induce vomiting; call for medical help immediately.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
· **Information for doctor:** Treat symptomatically and supportively.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
· **5.3 Advice for firefighters**
· **Protective equipment:**
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
Wear fully protective suit.
· **Additional information**
Cool endangered receptacles with water spray.
Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep ignition sources away - no smoking.
· **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow product to reach sewage system or any water course in the undiluted form.
· **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb liquid components with liquid-binding material.
Send for recovery or disposal in suitable receptacles.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 3)

Welding and other hot work operations in the work area must only be permitted under supervision.
The product must only be handled by authorised, trained and experienced professionals under strictly controlled conditions.

· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Prevent any seepage into the ground.
· **Information about storage in one common storage facility:**
Store away from oxidising agents.
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
· **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Store in a bunded area.
Store in a bunded area.
· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**
· **Additional information about design of technical facilities:** No further data; see item 7.
· **Ingredients with limit values that require monitoring at the workplace:** Not required.
· **DNELs**
Workers - Hazard via inhalation route
Systemic effects
Long term exposure
- DNEL (Derived No Effect Level): 0.35 mg/m³
Workers - Hazard via dermal route
Systemic effects
Long term exposure
- DNEL (Derived No Effect Level): 0.1 mg/kg bw/day

General Population - Hazard via inhalation route
Systemic effects
Long term exposure
- DNEL (Derived No Effect Level): 0.1 mg/m³
General Population - Hazard via dermal route
Systemic effects
Long term exposure
- DNEL (Derived No Effect Level): 0.05 mg/kg bw/day
General Population - Hazard via oral route
Systemic effects
Long term exposure
- DNEL (Derived No Effect Level): 0.05 mg/kg bw/day
· **PNECs**
PNEC aqua (freshwater): 0.021 mg/L
PNEC aqua (marine water): 0.002 mg/L
PNEC STP: 5.67 mg/L
PNEC sediment (freshwater): 0.092 mg/kg sediment dw
PNEC sediment (marine water): 0.009 mg/kg sediment dw
PNEC soil: 0.006 mg/kg soil dw
Secondary poisoning: no potential for bioaccumulation

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 4)

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
Do not eat, drink, smoke or sniff while working.
Ensure that eyewash stations and safety showers are close to the workstation location.
A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.
· **Respiratory protection:**
Use suitable respiratory protective device in case of insufficient ventilation.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**

Tightly sealed goggles

· **Body protection:**
Solvent resistant protective clothing
Body protection must be chosen depending on product properties, activity and possible exposure.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Fluid
Colour:	Clear
· **Odour:**	Amine-like
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/freezing point:	-59 °C
Initial boiling point and boiling range:	119 °C

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 5)

· **Flash point:**	16.5 °C
· **Flammability (solid, gas):**	Not applicable.
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	150 °C
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapour pressure:**	Not determined.
· **Density at 20 °C:**	0.78 g/cm³
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water at 20 °C:**	1000 g/l
· **Partition coefficient: n-octanol/water at 20 °C:**	-0.13 log POW
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **9.2 Other information**	NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
To avoid thermal decomposition do not overheat.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:**
Strong acids and oxidising agents
Strong bases.
· **10.6 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if swallowed or if inhaled.
· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**
Causes severe skin burns and eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 6)

· **Additional toxicological information:**
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** Inherently biodegradable
· **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Recommended Hierarchy of Controls:
- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.
Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· **Uncleaned packaging:**
· **Recommendation:**
Disposal must be made according to official regulations.
Container remains hazardous when empty. Continue to observe all precautions.
Containers, even those that are “empty,” may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN2372
· **14.2 UN proper shipping name**	
· **ADR**	2372 1,2-DI-(DIMETHYLAMINO) ETHANE

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.02.2021 Revision: 23.02.2021

Trade name: TEMED

(Contd. of page 7)

· **IMDG, IATA**	1,2-DI-(DIMETHYLAMINO) ETHANE
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	
	
· **Class**	3 Flammable liquids.
· **Label**	3
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	II
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· **Hazard identification number (Kemler code):**	33
· **EMS Number:**	F-E,S-D
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	1L
· **Transport category**	2
· **Tunnel restriction code**	D/E
· **UN "Model Regulation":**	UN2372, ,2-DI-(DIMETHYLAMINO) ETHANE, 3, II

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **National regulations:**

· **Information about limitation of use:**

Class	Share in %
NK	100.0

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B