

1. PRODUCT/PREPARATION/COMPANY

 Trade name: **Termi-DNA-Tor**

 Company: Biotoools, B & M Labs, S.A.
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Product Number: 22.001, 22.002

Emergency number: please contact Biotoools distributor in your country. Spain only: 91 562 04 20

2. COMPOSITION OF THE PRODUCT/INFORMATION ON INGREDIENTS

Chemical characterisation: Alcohol solution. Volume of each product package varies: 450 ml – 900 ml.

Active ingredients:

CAS-No	EC no	Name	Contents	Danger ¹	Risks
7173-51-5	230-525-2	Didecyl dimethyl ammonium chloride solution	<5%	C Xn N	R 22-34-50
50-00-0	200-001-8	Formaldehyde solution	<30 %	T	R 23/24/25 34 40 43
107-22-2	203-474-9	Glyoxal solution	<30%	Xn	R 20 36/38 43 68 S 36/37
111-30-8	203-856-5	Glutaraldehyde solution	<30%	T N	R 23/25 34 42/43 50 S 26- 36/37/39- 45- 61

3. HAZARDS IDENTIFICATION
Primary routes of entry

Skin or eye contact from splashes

Ingestion

Harmful if swallowed. May cause irritation to the gastrointestinal tract.

Skin contact

May cause irritation

Eye contact

Irritating

Evidence for reproductive toxicity, carcinogenicity and mutagenicity

This product contains a component that has been reported to be probably carcinogenic.

Hazard Ingredients	
Didecyl dimethyl ammonium chloride solution	Harmful if swallowed. Causes burns. Very toxic to aquatic organisms.
Formaldehyde solution	Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Possible risk of cancer. May cause sensitization by skin contact.
Glyoxal solution	Harmful by inhalation. Irritating to eyes and skin. May cause sensitization by skin contact. Possible risks of irreversible effects. Wear suitable protective clothing and gloves.
Glutaraldehyde solution	Toxic by inhalation and if swallowed. Causes burns. May cause sensitization by inhalation and

¹ Dangers and risks on active ingredients are applicable to pure ingredients. Amounts present in the specified product are under threshold levels as per Directive 67/548/EC and other European Legislation in force.



skin contact. Very toxic to aquatic organisms. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible). Avoid release to the environment. Refer to special instructions/Safety data sheets.

4. FIRST AID MEASURES

Because of the toxic and highly absorptive nature of some of the active ingredients of the product, quickly providing first aid helps to minimize health effects.

Skin contact

Wash skin with water and soap and rinse thoroughly. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention.

Eye contact

Rinse opened eyes for at least 15 min with copious amounts of water. Check for and remove any contact lenses. Call a physician.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth with plenty of water. Call a physician. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Fire and explosion hazards

Emits irritant or toxic fumes under fire conditions.

Protective equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear protective gloves and goggles.

Environmental precautions

Product must not enter ground, sewerage system or water course

Measures for cleaning/collecting

Collect spilled liquid with liquid-binding material or inert absorbent and place it in a container for disposal. Wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling

Always keep the containers tightly closed. Observe good laboratory technique when handling.

Storage

Store in the original container, in a cool dry place.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure limits

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

Eye protection

Wear goggles

Hand protection

Wear protective gloves

Skin protection

Wear labcoat

Hygiene measures

General industrial hygiene practice.

Breathing equipment

Use an approved/certified respirator or equivalent



9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid
Colour: Greenish
Odour: Like alcohol
Boiling point: no data available.

Flash point: no data available
Explosive properties: no data available
Vapor pressure: no data available
pH: 5.5-6.5

10. STABILITY AND REACTIVITY

Stability

Stable under normal handling and storage conditions

Decomposition

Formaldehyde may form decomposition vapours at room temperature or in contact with metals. However, concentration present in Termi-DNA-Tor does not pose any serious hazard

Conditions to avoid

Avoid use on materials sensitive to alcohol and on hot surfaces. Do not light flames or smoke during application.

11. TOXICOLOGICAL INFORMATION

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

Acute toxicity

Termi-DNA-Tor: oral, rat, LD50: 49.5 mL/kg
Formaldehyde: oral, rat, LD50: 203 mg/m³
Didecyl dimethyl ammonium chloride: oral, rat, LD50: 268 mg/kg
Glutaraldehyde: oral, rat, LD50: 134 mg/kg

Chronic exposure

Products may cause allergic reactions in certain sensitive individuals
This product contains a component that has been reported to be probably carcinogenic.

Sensitization

No data available

12. ECOLOGICAL INFORMATION

This product contains various components that have been reported to be very toxic to aquatic organisms. Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Controlled disposal in waste system. Product disposal (leftovers or residues resulting from normal use) does not pose any serious hazards in the adequate proportion.
The product and packaging should be disposed of in accordance with the instructions of the local authorities.

14. TRANSPORT INFORMATION

RID/ADR

Not regulated

IMDG

Not regulated

IATA

Not regulated.

15. REGULATORY INFORMATION

Termini-DNA-Tor	
Indication of Danger	Xi Irritant
R phrases	R10 Flammable. R36/38 Irritating to eyes and skin. R48 Danger of serious damage to health by prolonged exposure.
S Phrases	S2 Keep out of the reach of children. S13 Keep away from food, drink and animal feedingstuffs. S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37 Wear suitable gloves. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge, and is applicable to the product with regards to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Biotoools, B & M Labs, S.A. shall not be held liable for any damage resulting from handling or from contact with the above product.

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