



MATERIAL SAFETY DATA SHEET

According to EU Directive 91/155 EC

Reviewed on: 15/10/08

1. Chemical product and company identification

Product details

Trade name: T4 DNA Ligase

Catalogue number: GC-011-0100 100 units
GC-011-0250 250 units
GC-011-0500 500 units
GC-011-1000 1000 units
GC-011-5000 5000 units

Manufacturer / Supplier:

Semiramis Genetics Limited
GeneCraft Products
Manchester Science Park
Unit 57 Greenheys
Pencroft Way, Hulme
Manchester M15 6JJ
Tel.: +44 (0) 161 226 3571 / Fax: +44 (0) 161 868 0708

Further information obtainable from: Details as above

2. Composition / Information on ingredients

Chemical characterisation

Description: Mixture of substances listed below with non-hazardous additions

Dangerous components: None

Composition	%	CAS #
Glycerol	50%	56-81-6
Tris-HCl	<1%	77-86-1
EDTA	<1%	60-00-4
Dithiothreitol (DTT)	<1%	3483-12-3
Potassium chloride	<1%	7447-40-7
BSA	<1%	NA

3. Hazards identification

Emergency overview: The hazards identified with this product are those associated with the following component: None

OSHA Hazards: No known hazards.

HMIS Rating: Health: 1, Flammability: 0, Reactivity: 1

NFPA Rating: Health: 1, Flammability: 0, Reactivity: 1

4. First-aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints

After skin contact: Generally the product does not irritate the skin. Wash with soap and copious amounts of water.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist consult doctor.

After swallowing: Wash mouth out with water. If symptoms persist consult doctor.

5. Fire fighting measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedures: Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Fire and explosion hazards: Combustible liquid. Emits toxic fumes under fire conditions.

Flammability: N/A

6. Accidental release measures

Person-related safety precautions: Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of vapors. Wear disposable coveralls and discard them after use.

Methods for cleaning up: Absorb on sand or vermiculite and place in a closed container for disposal. Ventilate area and wash spill site after material pickup is complete.

7. Handling and storage

Handling: Provide appropriate exhaust ventilation.

Storage: Keep tightly closed in a dry and well ventilated place. Store at -20°C.

8. Exposure controls / Personal protection

Engineering controls: Safety shower and eye bath. Mechanical exhaust required.

Eye protection: Wearing safety goggles is advised.

Skin protection: Gloves should be worn, either rubber or chemical resistant.

Respiratory protection: Not required.

Hygiene practices: Wash hands thoroughly after handling. Wash contaminated clothing before use.

9. Physical and chemical properties

Concentration: 10 Weiss units/ μ l
Melting point: 20°C
Boiling point: 182°C
Flash point: 160°C Method: closed up
Self-igniting: 370°C
Solubility: water

10. Stability and reactivity

Stability: Stable

Materials to avoid: Acid chlorides, phosphorus halides, strong oxidizing agents, strong acids, strong reducing agents.

Hazardous polymerization: Will not occur.

Dangerous products of decomposition: carbon monoxide, carbon dioxide, sulfur dioxides.

11. Toxicological information

Primary irritation effect

On the skin: May cause irritation effect

On the eye: May cause irritation effect

Sensitization: May cause sensitizing effect

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

12. Ecological Information

Data yet not available.

13. Disposal Considerations

Contact a licensed professional waste disposalservice to dispose of this material. Observe all state and local environmental regulations. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. Transport Information

Land transport: Product does not belong to a hazard class of any international agreements on the transport and packaging of dangerous goods.

Maritime transport: This product is not a marine pollutant.

Air transport: Product does not belong to any hazard classification.

15. Regulatory Information

Labelling according to EU Guidelines:

General safety regulations should always be observed when handling chemicals.

This product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials.

16. Other Information

All information, and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. We reserve the right to revise Material Safety Data Sheets as new information becomes available.