

MATERIAL SAFETY DATA SHEET

CL006 T4 DNA Ligase

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1. PRODUCT DETAILS

Trade Name: T4 DNA Ligase

Catalog Number: CL005, CL005-S, CL006.

1.2. COMPANY DETAILS

Supplier: Canvax Reagents S.L., Luis de Mercado St. 19, Boecillo Technological Park, Valladolid (Spain)

1.3. EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: 900-868538 (CHEMTREC España)
+(34)-931768545 (CHEMTREC international)

2. HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Classification (67/548/CEE) or (1999/45/CE): not classified.

Physical Hazards: H228: Flammable solid – H302: Harmful if swallowed.

Health Hazards: H302: Harmful if swallowed – H315: Causes skin irritation – H318: Causes serious eye damage– H335: May cause respiratory irritation

Environmental Hazards: H412: Harmful to aquatic life with long lasting effects..

2.2. ABEL ELEMENTS

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3. PREVENTIVE ADVICE

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

FIRST AID MEASURES

3.2. DESCRIPTION OF DIRTS AID MEASURES

Inhalation: After inhalation: fresh air.

Ingestion: After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.



MATERIAL SAFETY DATA SHEET

CL006 T4 DNA Ligase

Skin contact: In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

Eye contact: After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

3.3 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

May cause irritation to skin, eyes, and respiratory tract, may affect kidneys.

3.4 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Non-specific recommendations. In case of doubt, seek medical attention immediately.

FIRE FIGHTING MEASURES

4.2 EXTINGUISHING MEDIA

Water Foam Carbon dioxide (CO₂) Dry powder.

4.3 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Carbon oxides

Combustible.

Fire may cause evolution of:

Acrolein

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

4.4 ADVICE FOR FIRE FIGHTERS

Prevent fire extinguishing water from contaminating surface water or the ground water system.

ACCIDENTAL RELEASE MEASURES

5.2 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

5.3 ENVIRONMENTAL PRECAUTIONS

Do not let product enter drains.

5.4 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

5.5 REFERENCE TO OTHER SECTIONS

For disposal see section 13.

HANDLING AND STORAGE

MATERIAL SAFETY DATA SHEET

CL006 T4 DNA Ligase

6.2 PRECAUTIONS FOR SAFE HANDLING

Advice on safe handling: Work under hood. Do not inhale substance/mixture.

Advice on protection against fire and explosion: Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures: Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

6.3 CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITIES

Storage conditions Tightly closed. Keep away from heat and sources of ignition. Hygroscopic.

6.4 SPECIFIC END USE(S)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

EXPOSURE CONTROLS / PERSONAL PROTECTION

7.2 CONTROL PARAMETERS

NA.

7.3 EXPOSURE CONTROLS

Special protective equipment



Eye/face protection: The following protection should be worn: Chemical splash goggles.

Hand protection: It is recommended that gloves be made of the following materials: Nitrile rubber.

Other skin and body protection: Wear rubber apron. Wear rubber footwear.

Respiratory protection: If ventilation is insufficient, suitable respiratory protection should be worn.

PHYSICAL AND CHEMICAL PROPERTIES

8.2 BASIC INFORMATION ON PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid.

Color: colorless.

Odor: odorless.

Solubility(ies): miscible.

8.3 OTHER INFORMATION

Not determined.

STABILITY AND REACTIVITY



MATERIAL SAFETY DATA SHEET

CL006 T4 DNA Ligase

9.2 REACTIVITY

Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical.

9.3 CHEMICAL STABILITY

The product is chemically stable under standard ambient conditions (room temperature).

9.4 POSSIBILITY OF HAZARDOUS REACTIONS

Violent reactions possible with strong oxidizing agents.

9.5 CONDITIONS TO AVOID

Strong heating.

9.6 INCOMPATIBLE MATERIALS

Strong oxidizing agents

9.7 HAZARDOUS DECOMPOSITION PRODUCTS

In the event of fire: see section 5.

TOXICOLOGICAL INFORMATION

10.2 INFORMATION ON TOXICOLOGICAL EFFECTS

Inhalation: May cause respiratory irritation by inhalation.

Ingestion: Gastrointestinal symptoms, including stomach upset.

Skin contact: Irritating to skin.

Eye contact: Risk of irreversible effects on eyes.

ECOLOGICAL INFORMATION

Ecotoxicity: The components of the product are not classified as hazardous to the environment. Large or frequent spills may have harmful effects on the environment.

11.2 TOXICITY

Flow-through test LC50 - Pimephales promelas (fathead minnow) – 54,000mg/l - 96 h

11.3 PERSISTENCE AND DEGRADABILITY

Aerobic - Exposure time 1 d.

11.4 BIOACCUMULATION POTENTIAL

Cyprinus carpio (Carp) - 72 h.

11.5 MOBILITY IN THE SOIL

No data available.

11.6 PBT AND vPvBm ASSESSMENT RESULTS

MATERIAL SAFETY DATA SHEET

CL006 T4 DNA Ligase

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

11.7 OTHER ADVERSE EFFECTS

Not determined.

DISPOSAL CONSIDERATIONS

12.2 WASTE TREATMENT METHODS

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers or contact us there if you have further questions. Notice Directive on waste 2008/98/EC.

TRANSPORT INFORMATION

13.2 UN-NUMBER

ADR/RID: - IMDG: - IATA: -.

13.3 UN PROPER SHIPPING NAME

ADR/RID: Not dangerous goods,
IMDG: Not dangerous goods,
IATA: Not dangerous goods

13.4 TRANSPORT HAZARD CLASS(ES)

ADR/RID: - IMDG: - IATA: -

13.5 PACKAGING GROUP

ADR/RID: - IMDG: - IATA: -

13.6 ENVIRONMENTAL HAZARDS

Hazardous pollutant substance/marine pollutant: No.

13.7 SPECIAL PRECAUTIONS FOR USER

No information required.

13.8 TRANSPORT IN BULK ACCORDING TO ANNEX II MARPOL73/78 AND THE IBC CODE

Not classified as dangerous in the meaning of transport regulations.

REGULATORY INFORMATION

14.2 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

National Provisions: The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU Legislation: Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (as amended).



MATERIAL SAFETY DATA SHEET

CL006 T4 DNA Ligase

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures (as amended).

Guidance: CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131.

14.3 CHEMICAL SAFETY ASSESSMENT

Any chemical safety assessment has been carried out.

OTHER INFORMATION

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Users should make independent decisions regarding completeness of the information based on all sources available.

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 regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Canvax Reagents S.L. shall not be held liable for any damage resulting from handling or from contact with the above product. See our website for our terms and conditions of sales.