



Halotech DNA, S.L.

## MATERIAL SAFETY DATA SHEET

**PRODUCT: HALOMAX - Kit for the determination of the DNA fragmentation level in spermatozoa.**

### 1. IDENTIFICATION OF THE MANUFACTURER

HALOTECH DNA SL.  
Parque Tecnológico de Madrid  
Santiago Grisolia, 2 - 28760 Tres Cantos (Madrid-Spain)

### 2. COMPOSITION / INFORMATION OF THE COMPONENTS:

#### Components nº CAS Phrases R/S

Agarose 9012-36-6 Free of toxic classification  
Hydrochloric acid 7614-01-0 R34-37 S26-36/37/39-45  
Sodium chloride 7647-14-5 Free of toxic classification  
Tris 77-86-1 Free of toxic classification  
Dithiothreitol (DTT) 3483-12-3 R22 36/37/38 S26 36  
Triton X-100 9002-93-1 R22-41 S24-26-39  
Bidistilled water - Free of toxic classification

### 3. HAZARD

Possibility of irreversible effects. Harmful if swallowed. Irritating to eyes, respiratory system and skin.

### 4. FIRST AID

Never provide drink or induce vomiting in the event of loss of consciousness.

4.1. After inhalation: Take the person out into the fresh air. If the breathing is irregular or it stops, practice artificial respiration. If the affected breathes with difficulty, administer oxygen. If the affected is unconscious, he/she shall be placed in the appropriate recovery position. Maintain the affected covered with hot clothes until medical care is provided.

4.2. After eye contact: Wash by irrigation with abundant clean and fresh water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call an ophthalmologist.

4.3. After contact with the skin: Wash the affected area vigorously with abundant water. In case of redness or eruptions, consult a physician immediately. Remove contaminated clothing and shoes.

4.4. After ingestion: If the affected is conscious, wash the mouth. Drink large amounts of water, avoid vomit. Search for immediate medical care.

### 5. FIRE

Non-combustible. In case of fire in the area surrounding, extinguish with water spray, carbon dioxide, dry chemical powder, or appropriate foam.

#### SPECIAL RISKS

Specific Hazards: Emits toxic fumes under fire conditions.

### 6. ACCIDENTAL SPILLAGE

6.1 Individual precautions:

Avoid direct contact with the product.

6.2 Precautions for the care of the environment:

Do not allow it to enter the drainage system. In case of major spilling, inform the authorities according to local legislation.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials not combustible: dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation. Ventilate area and wash spill site after material pickup is complete.

### 7. HANDLING AND STORAGE

7.1. Handling:

No special indications. Follow local legislation concerning security and hygiene.

Well sealed containers. Dry atmosphere. Atmospheric temperature.

Recommendations to prevent toxicological risk:

Wash hands carefully after manipulation.

7.2. Storage:

Keep away from children.

Seal containers and keep them in vertical position after use.

Fulfill the commitments under local environmental protection legislation.

Maximum storage: according to label in product.

Storage in fresh and dry warehouse.

7.3. Materials to be avoided

Keep away from reducing agents: alkalis, peroxides.

7.4. Conditions to be avoided

Heat: keep away from heat sources.  
Light: avoid direct sun radiation.

## 8. STAFF EXPOSURE/PROTECTION CONTROLS

8.1. Technical protective measures:

Ensure good ventilation and renewal of the air in the premises.

8.2. Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection.

8.3 Eye and face protection:

Use suitable goggles.

8.4 Hand and skin protection:

Use suitable gloves and overall.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

The supplier of the protection equipment must specify the type of protection to be worn when handling the substance or preparation, including the type of material and the breakthrough time of the material, with regard to the amount and duration of exposure.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous liquid.

Odor: Unpleasant odor.

## 10. STABILITY AND REACTIVITY

10.1. Stable under recommended storage and manipulation conditions.

10.2. Dangerous reactions: possible dangerous reactions with reducing agents, alkalis and peroxides.

## 11. TOXICOLOGICAL INFORMATION

There is no toxicological available data for the product. The product shall be handled with the usual precautions of other chemical products.

Components:

Chloridric acid. CL50 (inhale, rat): 3.124 ppm (V) 1h (referred to pure substance). No harm for embryo is limit concentration value are maintained in the workplace (MAK).

Tris: LD50 (oral, rat): 5.900mg/Kg

DTT: LD50 (oral, rat): 400mg/Kg; LD50 (intraperitoneal, rat): 154 mg/Kg; LD50 (intramuscular, rat): 108 mg/Kg.

Exposure can cause: Nausea, headache, and vomiting.

TRITON X-100: LD50 (oral, rat): 1.800mg/Kg

## 12. ENVIRONMENTAL INFORMATION

Ecotoxic data not available.

12.1. Risk for the land environment:

Avoid ground penetration

12.2. Risk for water environment:

Avoid entry into the drainage system.

12.3. Risk for the air environment:

Does not apply.

## 13. DISPOSAL CONSIDERATIONS

SUBSTANCE DISPOSAL

Observe all federal, state, and local environmental regulations. Take all necessary precautions to avoid residual waste.

Avoid entry into the drainage system.

## 14. TRANSPORT INFORMATION

Does not apply.

## 15. REGULATORY INFORMATION

R34-37: It causes burns. It irritates the respiratory tract.

S26-36/39-45: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. In case of accident or malaise, seek immediate medical advice.

R22 36/37/38: Harmful if ingested. Causes eye irritation, skin irritation and irritates the respiratory tract.

R22-41: Harmful if ingested. Risk of serious ocular injuries.

## 16. OTHER INFORMATION

The information in the Material Security Data Sheet was written up according to the Annex III of the Royal Decree 1078/1993 (88/379/CE and 91/155/CE) July 2nd, published in the BOE on September 9th, 1993, actualized by the Order of February 20th, 1995 (93/18/CE), published in the BOE on February 23rd, 1995, as well as in the Royal Decree 363/1995 (67/548/CE) of March 10th, published in the BOE of June 5th, 1995, in which was approved the Regulation on notification of new substances and classification, labeling and packaging of dangerous substances, and the technical Annexes were actualized until the Order of February 21st, 1997 (94/69/CE), published in the BOE of March 10th, 1997. The regulations 96/54/CE and 96/56/CE were also considered.

The information included in this Safety Data Sheet is based on our most upto-date knowledge and in the legislation of the EU and local, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed. The working conditions are therefore out the company's knowledge and control. The product does not have to be used for aims different from which is specified, without having first written instruction of its handling. It is always responsibility of the user to take the opportune measures to fulfill the exigencies established in the effective legislations. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. The information does not generate any legal nor contractual relation.