

MATERIAL SAFETY DATA SHEET

Twinsensor BT Kits: code BT00640 & BT00641.

MSDS Number : U50108
Issue Date : August 1, 2005
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1- Chemical product and Company Identification :

Product :

Twinsensor dipstick and reagent wells are part of the Twinsensor BT kit which allows simultaneous detection of beta-lactam and tetracycline molecules in milk and dairy products. The assay is commercialised by UNISENSOR S.A. (Belgium).

Company:

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2- Material identification :

- 1/ Dipstick.
- 2/ White Dipstick Cartridge and cap with silica gel.
- 3/ Reagent.
- 4/ Plastic wells and bags.
- 5/ Disposable pipette & tips.

Product safety statement :

As assessment of their composition has shown that most of the above-named materials are non-hazardous or toxic in nature. According to the European Directives, the Tetrasensor Kit contains the following three hazardous ingredients listed below from "1-" to "3-". **However, the concentrations or quantities added into the Tetrasensor component are very low so that safety data need not be provided.**

For further details, please refer to the MSDS of the manufacturers of the listed items :

- 1- Backed Nitrocellulose from [Millipore \(Be\)](#) (cat nb: SHF0750225) as part of the Dipstick (1,25 cm² x 0.3 mm thick),
- 2- Silica gel from GRACE as part of the inner cap (1 g) of the Dipstick Cartridge from AIRSEC (Fr) (cat nb: A104102).
- 3- Hepes from [SIGMA \(Be\)](#) (cat nb:H7006) as part of the Reagent (2,6 mg).

The recipient of these safety data is responsible for passing the safety information on so that it reaches the ultimate user who may come into contact with the material.

The information contained in this safety data sheet, as of the issue date, is believed to be true and correct. However the accuracy or completeness of this information cannot be guaranteed and any recommendations or suggestions are made without warranty.

The recipient of this product is responsible for observing any laws and guidelines applicable. This product is intended for in vitro diagnostic, laboratory and research use only.

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What follows is a general summary for pure products, for details please refer to specific MSDS.

3- Hazard Identification :

Physical data: White solid (1-, 2-) and Pink solid (3-).

Physical Hazard: Flammable Solid (1-).

Health effects :

Skin: Repeated or prolonged contact may cause irritation and/or dry, cracked skin.

Eyes: Although it is unlikely to occur, eye contact may cause irritation and burns.

Ingestion: Although it is unlikely to occur, ingestion may cause digestive tract irritation, central nervous system depression and kidney damage.

Inhalation: Although it is unlikely to occur, inhalation may cause irritation of the mucous membranes of the nose, throat, respiratory tract.

4- First aid :

Skin: Remove the contaminated clothes and shoes. Wash the exposed skin thoroughly with soap or mild detergent and flush with plenty of water. If the irritation persists or develops, seek medical attention.

Eyes: Wash the eyes immediately with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Ingestion: This material is unlikely to expose to an ingestion hazard in the quantities present in a workplace setting. However, if ingestion occurs, do not induce vomiting, have the victim rinse his/her mouth, drink 2-4 cups of water and seek medical attention.

Inhalation: This material is unlikely to expose to an inhalation hazard in the quantities present in a workplace setting. However, if inhalation occurs, get fresh air.

5- Fire fighting actions :

Fire hazards: Severe fire hazard (1-).

Extinguishing media: Regular dry chemical, sand, earth, regular foam, water.

6- Accidental release actions:

Spills and leaks: Avoid heat, flames, sparks and other sources of ignition. Collect material into suitable, loosely covered containers for disposal. Remove sources of ignition.

7- Handling and storage:

See the original container-for-storage recommendations. Keep away from sources of heat or ignition and separated from incompatible substances. Store and handle in accordance with all current regulations and standards.

8- Personal protection and exposure control:

Ventilation: General ventilation is adequate for most applications.

Personal protection: Safety glasses with side shields are adequate for normal use of these products.

Provide for an emergency eye wash fountain and a quick drench shower in the immediate work area. Wear appropriate chemical resistant, impervious gloves and protective clothing to prevent skin contact.

Respiratory use: Typically, respiratory use is not required.

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9- Physical and chemical properties of the "Pure Product".

	1- Nitrocellulose	2- Silica gel	3- Hepes
Physical state in the kit.	White solid	White granules, beads, powder	Pink mixture powder (2.6 mg/vial)
Specific gravity	Not available	2.1	Not available
Odor	None	None	None
Water solubility	Insoluble	Insoluble	Soluble z26020
PH	Not applicable	3.5 – 8.5	Not available
Melting Point	Decomposes	Not available	Not available
Boiling Point	Not available	Not available	Not available
Vapor Pressure	Not available	Not available	Not available
Vapor Density	Not available	Not available	Not available
Volatility	Not applicable	Not applicable	Not applicable
Evaporation Rate	Not applicable	Not applicable	Not applicable
Water/oil distribution	Not available	Not available	Not available

10- Stability and reactivity:

Chemical stability: Stable at normal temperatures and pressure.
 Conditions to avoid: Temperatures above 55°C, flames, sparks, other sources of ignition and contact with incompatible materials.
 Hazardous polymerisation: Will not occur
 Incompatible with: Oxidising agents
 Hazardous decomposition products: Oxides of carbon and nitrogen.

11- Toxicological information:

Carcinogenicity: (1-, 2-, 3-) Not listed as carcinogenic.
 Acute Effects: Possible skin, eye, and mucous membrane irritation.
 Toxicity data:

1- Nitrocellulose	Oral mouse	LD50 > 5 gm/kg
	Oral rat	LD50 > 5 gm/kg
2- Cellulose Acetate	Oral rat	LD50 > 3.2 gm/kg
	Oral rat	LD50 > 31.6 gm/kg
3- Silica gel	SKN rabbit	LD50 > 2 gm/kg
	Not Available	

12- Ecological information:

No information is available on the eco-toxicity or environmental impact of any of the compounds present in the product.

13- Disposal information:

No special disposal method required, except the one that is in accordance with the local authority regulations.

14- Transportation information:

Hazard class 4.1

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Packing group II

Label FLAMMABLE SOLID

15- Regulatory information:

Nitrocellulose and cellulose acetate are listed on the Toxic Substances Control Act (TSCA) Chemical Inventory.

California, no significant Risk Level: None of the chemicals in these products are listed.

European labelling in Accordance with EC Directives: F

Hazard Symbols:

Risk Phrases R11 Highly flammable

Safety Phrases S16 Keep away from sources of ignition, No Smoking.

S33 Take precautionary measures against static discharge

Canada, this product has a WHMIS classification of B4, D2B and F.

Hazard Symbols

Risk Phrases R32 After Contact with acids the pure product liberates very toxic gas.

Safety Phrases S28 After contact between the skin and the pure product, wash immediately with plenty of soap suds.

S61 Avoid release into the environment.

Issued by: UNISENSOR S.A.
Dr. Benoît Granier

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