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# MATERIAL SAFETY DATA SHEET Conforms to Regulation No. 1907/2006 (REACH)

Product name: Human Acylated Ghrelin ELISA

Catalog number: RA194062400R

Date of issue: 6th September 2012

Date of review: 6th September 2012

#### 1. Substance/preparation and manufacturer/importer identification

## 1.1 Substance/preparation

Product code: Human Acylated Ghrelin ELISA Product code: RA194062400R Use of substance/preparation: Determination of human acylated ghrelin in human plasma for research use

## 1.2 Manufacturer/importer identification

Name or commercial name: BioVendor - Laboratorní medicína a.s. Registered office: Tůmova 2265/60, 616 00 Brno, Czech Republic Identification number: 63471507 Emergency telephone number: Toxicology Information Centre, Na Bojišti1, 128 21 Prague, Czech Republic Telephone (round-the-clock service) +420-2-24 91 92 93 and +420-2-24 91 54 02

## 2. Information on product/preparation composition

The product contains the following hazardous substances and those with the following highest permissible concentrations in the working environment:

2.1 C442811 Conjugate so Identification numbers CAS: 26628-22-8 EC (EINECS): 247-852-1 Merck Index: 011-004-00-7	<b>lution</b> Chemical name of substance Sodium azide	Concentrations < 0.01 %	Risk and safety statements T+, R28-32, S1/2-28.1-37-45
2.2 C443141 Human Acylated Ghrelin Standard			
Identification numbers CAS: 26628-22-8	Chemical name of substance Sodium azide	Concentrations < 0.01 %	Risk and safety statements T+, R28-32, S1/2-28.1-37-45
EC (EINECS): 247-852-1 Merck Index: 011-004-00-7			
2.3 C444061 Quality control			
Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: 26628-22-8 EC (EINECS): 247-852-1	Sodium azide	< 0.01 %	T+, R28-32, S1/2-28.1-37-45
Merck Index: 011-004-00-7			

# 2.4 C445011 Dilution buffer

Identification numbersChemical name of substanceCAS: 26628-22-8Sodium azideEC (EINECS): 247-852-1Merck Index: 011-004-00-7

Concentrations < 0.01 %

Risk and safety statements T+, R28-32, S1/2-28.1-37-45

# 3. Substance/preparation hazards data

Special indication of hazards to humans and the environment: Harmful by inhalation, ingestion and skin absorption. Irritating to eyes, respiratory system and skin.

## 4. First aid instructions

General instructions: Immediately rinse with soap and plenty of water. Use personal protective working aids.

**If inhaled:** Transport the affected person into the open air. When there are respiratory complaints, oxygen must be administered. When irritation persists, seek medical advice.

In case of skin contact: The contaminated clothing and footwear must be taken off, the affected skin must be rinsed with plenty of water. Use soap to completely remove the substance. When irritation persists, seek medical advice.

In case of contact with eyes: Remove contact lenses. Rinse with a stream of water for at least 15 minutes. Thorough rinsing must be ensured by opening the eyelids using sterile (clean) fingers. When irritation persists, seek medical advice.

If ingested: Rinse the mouth, administer a big amount of water to dilute the substance. In the case of unconsciousness, never administer anything orally. Seek medical advice.

## 5. Extinguishing measures:

Suitable fire-extinguishing media: Carbon dioxide, dry powder, foam, water.

Thermal decomposition: No thermal decomposition degradation products are expected.

Special hazards: None.

Special protective means for firemen: None.

6. Incidental leakage measures:

Safety measures to protect humans: Avoid contact with skin and eyes. Wear suitable protective clothing and gloves.

Environmental safety measures: Avoid penetration into sewerage systems, surface and ground water. Avoid soil pollution.

**Recommended cleaning and disposal methods:** Cover with suitable absorbing material. After removing the substance, rinse the spot of spilling thoroughly with water and soap.

7. Handling and storage instructions:

Handling instructions: Avoid contact with skin, eyes and clothing. Use suitable protective means to work with the substance. Storage instructions: Store at -20°C in a dry and dark place.

## 8. Exposition checking and protection of persons:

**Technical measures:** Do not eat, drink and smoke when working with the kit. Use the kit only in rooms enabling good ventilation. Local exhaustion is necessary, general (forced) exhaustion is recommended.

Personal protective means – protection of respiratory organs: None

Personal protective means - eye protection: None

**Personal protective means – hand protection:** Protective gloves (wash your hands before and after work) **Personal protective means – body protection:** Protective clothing

# 9. Physical/chemical properties

State (at 20°C):

Liquids: Wash Solution Concentrate, Tween 20 Powders: Conjugate Solution, Ghrelin Standard, Quality Control, Dilution Buffer, Substrate Solution Colour: Colourless liquid or white powder Smell (odour): Odourless pH value (at 25°C): 6.8 - 7.4 Melting temperature (temperature range) (°C): No data available. Boiling temperature (temperature range) (°C): No data available. Flash point (°C): No data available. Inflammability: No data available. Vapour tension (°C): No data available. Water solubility: Soluble. Partition coefficient n-octanol/water: No data available. 10. Stability and reactivity Conditions to be avoided: Heat Substances and materials with which the product is not allowed to get in touch: Acids Hazardous decomposition products: Not known Other data: No hazardous polymerisation

#### 11. Toxicological information: Toxicological information The product contains sodium azide in total concentration < 0.01 % Acute toxicity-LD50 orally, rat (mg/kg): 27 Acute toxicity-LD50 dermally, rat or rabbit (mg/kg): 20 Acute gingivostomatitis LD50: Not known Acute toxicity-LD50 inspiration: Not known Irritability: No data available Mutagenicity: No data available Reproduction toxicity: No data available Tests on animals: No data available Other data: Sodium azide damages centre neural system, it causes tachycardy, it reduces hemic pressure, abbreviates respiration, causes headache, vomiting and nausea.

# 12. Environmental information

Water hazard class: 2 (water-damaging substances) Biological effect: Fish: toxicity L. macrochirus organismus: cca 5 mg/ml Acute toxicity for cold-blooded animals: 10 mg/ml of total concentration sodium azide

#### 13. Disposal Information

#### The manner of disposing the substance/preparation:

Mix or dissolve the material in a combustible solvent and burn up in a facility whose equipment matches all regulations in effect. Every waste disposal must be carried out in coincidence with national and local legislation or administrative regulations, respectively. **Packages:** 

In coincidence with local legislation or administrative regulations, respectively.

## 14. Transportation information

**Overland transportation (ADR/RID):** As a mixture, the substance is subject to no limitations. **Transatlantic transportation (IMDG):** As a mixture, the substance is subject to no limitations. **Air transportation (ICAO/IATA):** As a mixture, the substance is subject to no limitations.

## 15. Information on legal regulations

According to the Act No. 356/2003 Coll. on chemical substances and chemical preparations and on amendments in some other laws and acts, components contained in the Human Acylated Ghrelin ELISA are non-hazardous substances in said concentrations.

## 16. Additional information

The material safety data sheet contains data necessary to ensure safety and health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a chemical substance and can be solely used by persons with chemical education at their own risk.

Human Acylated Ghrelin ELISA is designed for biomedical research. The manufacturer has no responsibility for damage caused by unsuitable use and by disrespecting the enclosed working instructions.

The above-stated information cannot be considered as complete and must be understood to be only a methodical instruction.