# SAFETY DATA SHEET

Mercodia Ultrasensitive Rat Insulin ELISA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product Identifier

<table>
<thead>
<tr>
<th>Mercodia Ultrasensitive Rat Insulin ELISA 10-1251-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>- A) 20-3193 Coated plate</td>
</tr>
<tr>
<td>- B) 20-3139 Enzyme Conjugate 11X 1.3 mL</td>
</tr>
<tr>
<td>- C) 20-3191 Enzyme Conjugate Buffer 13 mL</td>
</tr>
<tr>
<td>- D) 20-3166 Calibrator 0.5 mL</td>
</tr>
<tr>
<td>- E) 20-3169, 20-3172</td>
</tr>
<tr>
<td>-         20-3175, 20-3178,</td>
</tr>
<tr>
<td>-         20-3181 Calibrator 1- 5 mL</td>
</tr>
<tr>
<td>- F) 20-2629 Substrate TMB 22 mL</td>
</tr>
<tr>
<td>- G) 20-6746 Wash Buffer 21X 50 mL</td>
</tr>
<tr>
<td>- H) 20-2693 Stop Solution 7 mL</td>
</tr>
</tbody>
</table>

### 1.2 Relevant identified use of the substance or mixture and uses advised against

The test provides a method for determination of Insulin in rat serum or plasma.

### 1.3 Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Mercodia AB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sylveniusgatan 8A</td>
</tr>
<tr>
<td>754 50 UPPSALA</td>
</tr>
<tr>
<td>tel: +46 (0) 18-57 00 70</td>
</tr>
<tr>
<td>fax: +46 (0) 18-57 00 80</td>
</tr>
<tr>
<td>e-mail: <a href="mailto:info@mercodia.se">info@mercodia.se</a></td>
</tr>
</tbody>
</table>

### 1.4 Emergency telephone

tel: +46 (0) 18-57 00 70

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous according to the classification rules in (EC) 1272/2008.

**Health:**

The product is not judged to be hazardous to health, although it may cause sensitisation by skin contact. May have a slight irritating effect on skin and eye contact as well as by inhalation- see further section 11.

**Environment:**

The product is not judged to be dangerous for the environment but the product contains very small amounts of a substance very toxic to the aquatic organisms and may cause long-term adverse effects in the aquatic environment.

**Fire:**

The product is not classified as flammable.

### 2.2 Label elements

The product is not classified as hazardous according to the classification rules in (EC) 1272/2008.

### 2.3 Other hazards

None known
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SECTION 3: Composition / information on ingredients

3.2 Mixtures
Hazardous ingredients:

<table>
<thead>
<tr>
<th>Component</th>
<th>Conc %</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulphuric acid (^1)</td>
<td>1-5</td>
<td>Skin Corrosion 1A; H314</td>
</tr>
<tr>
<td>Index-No: 016-020-00-8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS-No: 7664-93-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-No: 231-639-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kathon CG (^3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Index-No: 613-167-00-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS-No: 55965-84-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-No: -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) Included in solution \(^{1b}\).
2) Classification according to (EC)1272/2008. See description of Hazard statements and precautionary statements in section 16.
3) Included in solutions \(^{c}\), \(^{d}\), \(^{e}\), and \(^{g}\).

Kathon CG is a mixture of substances where two of the components, 5-chloro-2-methyl-2H-isothiazol-3-one (EG-nr 247-500-7) and 2-methyl-2H-isothiazol-3-one (EG-nr 220-239-6), in a mixture with the proportion 3:1 has a CAS No 55965-84-9. The content of this mixture in the Kathon CG is 1.5 w-% which gives the content of 0.0023 w-% of the dangerous mixture in the product.

SECTION 4: First aid measures

4.1 Description of first aid measures

**Inhalation:** Breathe fresh air and rest. If breathing is difficult, give oxygen.

**Skin contact:** Remove contaminated clothing. Wash the affected area with soap and water.

**Eye contact:** Rinse immediately with copious amount of water for at least 15 minutes with the eyelid held wide open. Consult a doctor if symptoms persist.

**Ingestion:** Rinse mouth and throat with water. Consult a doctor if symptoms persist. Never give anything to drink / eat to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

None known

4.3 Indication of any immediate medical attention and special treatment needed

Not applicable for the mixture
SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Water, carbon dioxide, powder, foam.

5.2 Special hazards arising from the substance or mixture
None known.

5.3 Advice for firefighters
Not applicable for the mixture.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
See "Precautions for safe handling", section 7.1 and "Exposure controls" section 8.2.

6.2 Environmental precautions
No special precaution is necessary.

6.3 Methods and material for containment and cleaning up
Clean up with absorbent paper and dispose of in a sealed container.

6.4 Reference to other sections
For current waste regulations, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Ensure good ventilation. Direct physical contact with all components in this product should be avoided.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed and at 2-8°C. Keep from freezing. Protect from light.

7.3 Specific end use (s)
Not applicable for the mixture.

SECTION 8: Exposure control/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Limit value – Eight hours</th>
<th>Limit value – Short term</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
<tr>
<td>H2Sulphuric acid</td>
<td>0,05 – 1*</td>
<td></td>
</tr>
</tbody>
</table>

*see current national legislation for details.
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8.2 Exposure controls

Ensure good ventilation. Avoid, if possible, direct contact with the product. An emergency shower and/or an eye bath should be available in the workplace.

Engineering controls: Not applicable for the mixture.
Eye/face protection: Use chemical safety goggles where splashing is possible.
Skin protection: No specific precautions necessary.
Hand protection: Chemical resistant gloves (butyl rubber, PE or PVC) may be used if risk of direct contact may occur.
Respiratory protection: No specific precautions necessary.
Thermal hazards: None known
Environmental exposure controls: None known.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: B), C), D), E), F), G), and H) Liquid, A) Solid
Colour: B), F), G) and H) Colourless C) Blue and D), E) Yellow.
Odour: Odourless
Odour threshold: Not applicable for the mixture
pH: B), C), D), E) and G) appr. 7 F) appr. 3.3 and H) appr. 0.5
Melting point/Freezing point: Approximately 0 °C
Initial boiling point and boiling range: Approximately 100 °C
Flash Point (°C): Not applicable for the mixture
Evaporation rate: Not applicable for the mixture
Flammability (solid, gas): Not applicable for the mixture
Upper/lower flammability or explosive limits: Not applicable for the mixture
Vapour pressure: Not applicable for the mixture
Vapour density: Not applicable for the mixture
Relative Density (g/cm³): B), C), D), E), F) and G) 1.0 and H) 1.1
Solubility (ies): Soluble in water
Partition coefficient; N-octanol/water: Not applicable for the mixture
Auto-ignition temperature: Not applicable for the mixture
Decomposition temperature: Not applicable for the mixture
Viscosity: Not applicable for the mixture
Explosive properties: Not applicable for the mixture
Oxidising properties: Not applicable for the mixture

9.2 Other information

None known
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SECTION 10: Stability and reactivity

<table>
<thead>
<tr>
<th>10.1 Reactivity</th>
<th>No available data for the mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.2 Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>10.3 Possibility of</td>
<td></td>
</tr>
<tr>
<td>hazardous reactions</td>
<td>None known</td>
</tr>
<tr>
<td>10.4 Conditions to avoid</td>
<td>None known</td>
</tr>
<tr>
<td>10.5 Incompatible materials</td>
<td>None known</td>
</tr>
<tr>
<td>10.6 Hazardous decomposition products</td>
<td>Insufficient combustion may form harmful oxides such as sulphur oxides, carbon oxides, nitrogen oxides, chloro oxides, phosfo oxides etc.</td>
</tr>
</tbody>
</table>

SECTION 11: Toxicological information

<table>
<thead>
<tr>
<th>11.1 Information on toxicological effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Irritation</td>
</tr>
<tr>
<td>Corrosivity</td>
</tr>
<tr>
<td>Sensitization</td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
</tr>
<tr>
<td>Carcinogenicity</td>
</tr>
<tr>
<td>Mutagenicity</td>
</tr>
<tr>
<td>Toxicity for reproduction</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

<table>
<thead>
<tr>
<th>12.1 Toxicity</th>
<th>Data not available for the mixture. Is judged to be of low toxicity to aquatic organism.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.2 Persistence and degradability</td>
<td>Data not available for the mixture. The product contains mainly water. For the inorganic substances, existing in very small amounts, there are no criteria for biodegradability. (^{10}) is being proteolysed to H(^+) and SO(_4^{2-}).</td>
</tr>
<tr>
<td>12.3 Bioaccumulative potential</td>
<td>Data not available for the mixture. The product is judged not to be potential bioaccumulated. The organic part is judged to be easily biodegradable. Note! The product contains a small amount of a complex binder (EDTA) in the amount of 0.4 % which slowly biodegrades in nature.</td>
</tr>
<tr>
<td>12.4 Mobility in soil</td>
<td>Data not available for the mixture.</td>
</tr>
</tbody>
</table>

\(^{10}\) Sulphuric acid 96%:
\[ LC_{50} \text{ (fish, 96h)} = 42 \text{ mg/L (mosquito fish)} \]
\[ EC_{50} \text{ (daphnia, 48h)} > 29 \text{ mg/L} \]
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12.5 Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
The product: Discarded product (incl. Contaminated packaging) and related waste is not hazardous waste acc. to current waste legislation. For disposal contact approved waste Management Company. Requirements for certain permission exists – see current waste legislation.
Propose EWC-code: 18 01 07 Wastes from natural care, diagnosis, treatment or prevention of disease in humans, chemicals other than those mentioned in 18 01 06.
Note! In used kit there might be a plastic plate with rests of blood which can be allotted an EWC-code 18 01 03 Wastes from natural care, diagnosis, treatment on prevention of disease in humans, waste whose collection and disposal is subject to special requirements in view of prevention of infection.

Emptyed packaging: Glass bottles exclusive of lids and fibreboard boxes may be sent to material recycling – see ”Emptying instruction” below.

Emptying instruction: Deliver empty glass bottles completely free of drip to glass recycling while fibreboard boxes can be delivered to relevant material recycling.

SECTION 14: Transport information

14.1 UN number Not applicable for the mixture
14.2 UN proper shipping name Not applicable for the mixture
14.3 Transport hazard Not applicable for the mixture
14.4 Packing group Not applicable for the mixture
14.5 Environmental hazards Not applicable for the mixture
14.6 Special precautions for user Not applicable for the mixture

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Relevant Workplace legislation due to the Occupational Exposure Limit.

15.2 Chemical safety assessment
Not applicable for the mixture

SECTION 16: Other information

Revised in section (-s): Version 2012-11-26 is rewritten in all sections in accordance with (EC) 453/2010 Appendix II.

Key literature references and sources for data:
(EC) 1272/2008, Supplier’s MSDS

List of hazard statements and precautionary statements:
H331 = Toxic if inhaled.
H311 = Toxic in contact with skin.
H301 = Toxic if swallowed.
H314 = Causes severe skin burns and eye damage.
H317 = May cause an allergic skin reaction.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.

The above information is believed to be correct and may not be all conclusive; however, it should only be used as a guide. Mercodia AB or Mercodia Inc. shall not be held liable for any damage resulting from handling or contact with the above product.