

MATERIAL SAFETY DATA SHEET

Total Insulin Northern Lights MBeads Assay

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

1.1 Product Identifier

Total Insulin Northern Lights MBeads Assay 10-1353-01	
- A)20-7635	MBeads Antibody, 2.5 mL
- B)20-7619	Calibrator 0, 5 mL
- C)20-7620 –	
20-7626	Calibrator 1- 7, 1000 µL
- D)20-7628	Control, 1000 µL
- E) 20-7630	Assay Buffer, 47 mL
- F)20-7633	Enzyme Conjugate 44X, 1 mL
- G)20-6746	Wash Buffer 21X, 50 mL
- H)20-7300	Substrate Reagent A, 7 mL
- I)20-7301	Substrate Reagent B, 7 mL

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

Mercodia's Total Insulin Northern Lights MBeads Assay is intended to be used for the measurement of Insulin in conditioned media from perfusion experiments or other *in vitro* cultures from cells derived from human and mouse specimens.

1.3 Details of the supplier of the safety data sheet

Mercodia AB
Sylveniusgatan 8A
754 50 UPPSALA, SWEDEN
tel: +46 (0) 18-57 00 70
fax: +46 (0) 18-57 00 80
e-mail: info@mercodia.se

1.4 Emergency telephone

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture (Kathon CG)

Included in solutions A), B), C), D), E) and G)

H317 skin sensitization - Category 1

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

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2.2 Label elements



Signal word: Warning
Hazard statement: H317 – May cause an allergic skin reaction

Precautionary statements

Prevention: P280 – Wear protective gloves.
P261 - Avoid breathing vapour.
P272 - Contaminated work clothing should not be allowed out of the workplace.
Response: P302 + P352 - if on skin: Wash with plenty of soap and water.
P333 + P313 - If skin irritation or rash occurs: Get medical attention.
Storage: Not applicable
Disposal: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
Supplemental label elements: Not applicable

Special packaging requirements

Tactile warning of danger: Not applicable

2.3 Other hazards

None known

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SECTION 3: Composition / information on ingredients

3.1 Mixtures

Hazardous ingredients:

Kathon CG²⁾	Conc %	Classification¹⁾
Index-No: 613-167-00-5	0.15 ²⁾	Acute Toxicity 3; H331
CAS-No: 55965-84-9		Acute Toxicity 3; H311
EC-No: -		Acute Toxicity 3; H301
		Skin Corrosion 1B; H314
		Skin Sensitisation 1; H317
		Aquatic Acute 1; H400
		Aquatic Chronic 1; H410

1) Classification according to (EC)1272/2008. See description of Hazard statements and precautionary statements in section 16.

2) Included in solution ^{A), B) C), D), E) and G)}.

Kathon CG is a mixture of substances where two of the components, 5-chloro-2-methyl-4-isothiazolin-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.

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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

Potential acute health effects

Eye contact:	No known significant effects or critical hazards
Inhalation:	No known significant effects or critical hazards
Skin contact:	May cause an allergic skin reaction
Ingestion:	No known significant effects or critical hazards

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments:	No specific treatment.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Water, carbon dioxide, powder, foam.

5.2 Special hazards arising from the substance or mixture

Decomposition products may include the following materials: carbon dioxide and carbon monoxide.

5.3 Advice for firefighters

No action shall be taken involving any personal risk or without suitable training.

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

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and material for containment and cleaning up

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<p>6.4 Reference to other sections</p>	<p>Clean up with absorbent paper and dispose of in a sealed container.</p> <p>See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. For current waste regulations, see section 13.</p>
<p>SECTION 7: Handling and storage</p>	
<p>7.1 Precautions for safe handling</p> <p>7.2 Conditions for safe storage, including any incompatibilities</p> <p>7.3 Specific end use(s)</p>	<p>Put on appropriate personal protective equipment (see Section 8). Ensure good ventilation. Direct physical contact with all components in this product should be avoided.</p> <p>Keep container tightly closed and at 2-8°C.</p> <p>Industrial applications. Professional applications.</p>
<p>SECTION 8: Exposure control/personal protection</p>	
<p>8.1 Control parameters</p> <p>8.2 Exposure controls</p> <p>Engineering controls:</p> <p>Eye/face protection:</p> <p>Skin protection</p> <p>Hand protection:</p> <p>Respiratory protection:</p> <p>Thermal hazards:</p> <p>Environmental exposure controls:</p>	<p>The mixture contains no substances with occupational exposure limits.</p> <p>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.</p> <p>Not applicable for the mixtures.</p> <p>Use chemical safety goggles where splashing is possible.</p> <p>Chemical resistant gloves (butyl rubber, PE or PVC) may be used if risk of direct contact may occur.</p> <p>Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification.</p> <p>None known</p> <p>Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.</p>

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	A), B), C), D), E), F), G), H), and I) Liquid
Colour:	A) Colourless with black beads ^{E), F), G), H) and I)} Colourless and ^{B), C) and D)} Yellow.
Odour:	Odourless
Odour threshold:	Not available.
pH:	H) and I) appr. 9 ^{A), B), E), F) and G)} appr. 7 and ^{C) and D)} appr. 6
Melting point/Freezing point:	Approximately 0 °C
Initial boiling point and boiling range:	Approximately 100 °C
Flash Point (°C)	Not available.
Evaporation rate:	Not available.
Flammability (solid, gas):	Not available.
Upper/lower flammability or explosive limits:	Not available.
Vapour pressure:	Not available.
Vapour density:	Not available.
Relative Density (g/cm³)	Appr. 1
Solubility (ies):	Soluble in water
Partition coefficient; N-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.
Explosive properties:	Not available.
Oxidising properties:	Not available.

9.2 Other information

No additional information.

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SECTION 10: Stability and reactivity	
10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	No specific data
10.5 Incompatible materials	May react or be incompatible with oxidizing materials.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SECTION 11: Toxicological information	
11.1 Information on toxicological effects	
Acute toxicity	5-chloro-2-methyl-4-isothiazolin-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, LD50 Oral, Rat, Dose 53 mg/kg.
Irritation	5-chloro-2-methyl-4-isothiazolin-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. Not available.
Sensitization	5-chloro-2-methyl-4-isothiazolin-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, Possible risk for allergic reaction may occur.
Repeated dose toxicity	Not available.
Carcinogenicity	Not available.
Mutagenicity	Not available.
Toxicity for reproduction	Not available.
Potential acute health effects	5-chloro-2-methyl-4-isothiazolin-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.
Eye contact:	No known significant effects or critical hazards.
Inhalation:	No known significant effects or critical hazards.
Skin contact:	May cause an allergic skin reaction.
Ingestion:	No known significant effects or critical hazards.

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SECTION 12: Ecological information

12.1 Toxicity

Data not available for the mixture. Is judged to be of low toxicity to aquatic organism.

12.2 Persistence and degradability

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.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Not available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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.

Packaging

Methods of disposal:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

Regulatory information

ADR/RID / IMDG / IATA Not regulated

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC code

Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization Annex XIV None of the components are listed

Substances of very high concerns

None of the components are listed

National inventory:

United States: All components are listed or exempted.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

Revised in section (-s): Version 2022-09-07 is completely updated in section 1.2.

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

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.