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

1. **Product identifier**
   - **Trade name**: LBIS Human Apo B-48 ELISA Kit / Standard human apo B-48
   - **Article number**: 637-10641 (B)
   - **Registration number**: Registration numbers of the individual components: see section 3.2, if applicable.

2. **Relevant identified uses of the substance or mixture and uses advised against**
   - **Application of the substance / the preparation**: Laboratory chemicals
   - **Uses advised against**: Only for professional use. Do not use for private purposes (household).

3. **Details of the supplier of the safety data sheet**
   - **Manufacturer/Supplier**: FUJIFILM Wako Chemicals Europe GmbH
     - Fuggerstr. 12
     - 41468 Neuss
     - Deutschland
     - Tel: +49 (0) 2131-311-0
     - Fax: +49 (0) 2131-311 100
   - **Further information obtainable from**: msds_eu@fujifilm.com
   - **Emergency telephone number**: +49 (0) 2131-311-0 (8h-16h)

### SECTION 2: Hazards identification

1. **Classification of the substance or mixture**
   - **Classification according to Regulation (EC) No 1272/2008**
     - Skin Sens. 1 H317 May cause an allergic skin reaction.

2. **Label elements**
   - **Labelling according to Regulation (EC) No 1272/2008**
     - The product is classified and labelled according to the CLP regulation.
   - **Hazard pictograms**
     - GHS07

3. **Signal word** Warning
   - **Hazard-determining components of labelling**:
     - 2-methyl-2H-isothiazol-3-one
   - **Hazard statements**
     - H317 May cause an allergic skin reaction.
   - **Precautionary statements**
     - P280 Wear protective gloves/protective clothing/eye protection/face protection.
     - P302+P352 IF ON SKIN: Wash with plenty of water.
     - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

(Cont. on page 2)
· 2.3 Other hazards
  · Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.

**SECTION 3: Composition/information on ingredients**

· 3.2 Mixtures
  · Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>CAS: 2682-20-4</th>
<th>EINECS: 220-239-6</th>
<th>2-methyl-2H-isothiazol-3-one</th>
<th>≤0.0015-&lt;0.025%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EINECS: 220-239-6</td>
<td>Skin Sens. 1A, H317</td>
<td>2-methyl-2H-isothiazol-3-one</td>
<td>2-methyl-2H-isothiazol-3-one</td>
</tr>
<tr>
<td></td>
<td>H330; Skin Corr. 1B, H314</td>
<td>Skin Sens. 1A, H317</td>
<td>2-methyl-2H-isothiazol-3-one</td>
<td>2-methyl-2H-isothiazol-3-one</td>
</tr>
<tr>
<td></td>
<td>Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330;</td>
<td>Skin Sens. 1A, H317</td>
<td>2-methyl-2H-isothiazol-3-one</td>
<td>2-methyl-2H-isothiazol-3-one</td>
</tr>
<tr>
<td></td>
<td>Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1);</td>
<td>Skin Sens. 1A, H317</td>
<td>2-methyl-2H-isothiazol-3-one</td>
<td>2-methyl-2H-isothiazol-3-one</td>
</tr>
<tr>
<td></td>
<td>Skin Sens. 1A, H317</td>
<td>Skin Sens. 1A, H317</td>
<td>2-methyl-2H-isothiazol-3-one</td>
<td>2-methyl-2H-isothiazol-3-one</td>
</tr>
</tbody>
</table>

· SVHC Does not contain a SVHC according to REACH, Article 57 >0.1%
· Additional information: For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

· 4.1 Description of first aid measures
  · General information: Immediately remove any clothing soiled by the product.
  · After inhalation: Supply fresh air; consult doctor in case of complaints.
  · After skin contact:
    - Immediately wash with water and soap and rinse thoroughly.
    - If skin irritation continues, consult a doctor.
  · After eye contact:
    - Rinse opened eye for several minutes under running water. Then consult a doctor.
  · After swallowing: If symptoms persist consult doctor.
· 4.2 Most important symptoms and effects, both acute and delayed Allergic reactions
· 4.3 Indication of any immediate medical attention and special treatment needed
  - No further relevant information available.

**SECTION 5: Firefighting measures**

· 5.1 Extinguishing media
  · Suitable extinguishing agents:
    - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  · For safety reasons unsuitable extinguishing agents: Water with full jet
· 5.2 Special hazards arising from the substance or mixture
  - No further relevant information available.
· 5.3 Advice for firefighters
  · Protective equipment: No special measures required.
  · Additional information
    - Collect contaminated fire fighting water separately. It must not enter the sewage system.
SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Remove persons from danger area.
  Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions:
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/surface or ground water.

- 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.

- 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.

- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles:
      Store only in the original receptacle.
      Store in cool, dry conditions in well sealed receptacles.
    - Information about storage in one common storage facility: Store away from foodstuffs.

- 7.3 Specific end use(s)
  No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.

- 8.1 Control parameters
  - Ingredients with limit values that require monitoring at the workplace:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists valid during the making were used as basis.

- 8.2 Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      Wash hands before breaks and at the end of work.
      Avoid contact with the eyes and skin.
      Do not eat, drink, smoke or sniff while working.
      Storing food in the working area is prohibited.
51.0

- Respiratory protection: Not necessary if room is well-ventilated.
- Protection of hands:
  - Protective gloves
  - Material of gloves
    Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: nitrile rubber (thickness ≥ 0.38 mm, breakthrough time > 480 min).
- Eye protection:
  - Safety glasses
  - The protective safety glasses to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN166.
- Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
  - Appearance: Liquid
  - Colour: According to product specification
  - Odour: Characteristic
  - Odour threshold: Not determined.
  - pH-value at 20 °C: 7.2-7.4
- Change in condition
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: Undetermined.
- Flash point: Not applicable.
- Flammability (solid, gas): Not applicable.
- Ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Not determined.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure: Not determined.
- Density: Not determined.
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.05.2020
Version number 2.0
Revision: 17.01.2020

Trade name: LBIS Human Apo B-48 ELISA Kit / Standard human apo B-48

(Cont. from page 4)

- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Not determined.
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  - 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: See "Fire Fighting measures". Protect from heat and direct sunlight.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
  - Acute toxicity: Based on available data, the classification criteria are not met.
  - LD/LC50 values relevant for classification:
    - 2682-20-4 2-methyl-2H-isothiazol-3-one
      - Oral LD50: 285 mg/kg (rat)
      - Dermal LD50: >2,000 mg/kg (rat)
      - Inhalative LC50/4h: 0.384 mg/L (rat)
- Primary irritant effect:
  - Skin corrosion/irritation: Based on available data, the classification criteria are not met.
  - Serious eye damage/irritation: Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation: May cause an allergic skin reaction.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
  - Germ cell mutagenicity: Based on available data, the classification criteria are not met.
  - Carcinogenicity: Based on available data, the classification criteria are not met.
  - Reproductive toxicity: Based on available data, the classification criteria are not met.
  - STOT-single exposure: Based on available data, the classification criteria are not met.
  - STOT-repeated exposure: Based on available data, the classification criteria are not met.

(Cont. on page 6)
Aspiration hazard Based on available the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
  - Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxicological effects:
  - Comment: Harmful to fish
- Additional ecological information:
- General notes:
  - Harmful to aquatic organisms
  - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
  - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- 12.5 Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation
    - Must not be disposed together with household garbage. Do not allow product to reach sewage system.
    - Contact waste processors for recycling information.
- Uncleaned packaging:
  - Recommendation:
    - Disposal must be made according to official regulations.
    - Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, IMDG, IATA: Not applicable
- 14.2 UN proper shipping name
  - ADR, IMDG, IATA: Not applicable
- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: Not applicable
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: LBIS Human Apo B-48 ELISA Kit / Standard human apo B-48

(Cont. from page 6)

- 14.4 Packing group
  - ADR, IMDG, IATA
    Not applicable
- 14.5 Environmental hazards:
  Not applicable.
- 14.6 Special precautions for user
  Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  Not applicable.
- UN "Model Regulation":
  Not applicable

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  H301 Toxic if swallowed.
  H311 Toxic in contact with skin.
  H314 Causes severe skin burns and eye damage.
  H317 May cause an allergic skin reaction.
  H318 Causes serious eye damage.
  H330 Fatal if inhaled.
  H400 Very toxic to aquatic life.
  H410 Very toxic to aquatic life with long lasting effects.
- Creation Date 17.01.2020
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  SVHC: Substances of Very High Concern
  vPvB: very Persistent and very Bioaccumulative
  Acute Tox. 3: Acute toxicity - oral – Category 3
  Acute Tox. 2: Acute toxicity - inhalation – Category 2
  Skin Corr. 1B: Skin corrosion/irritation – Category 1B
  Eye Dam. 1: Serious eye damage/eye irritation – Category 1

(Cont. on page 8)
<table>
<thead>
<tr>
<th>Trade name: LBIS Human Apo B-48 ELISA Kit / Standard human apo B-48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Sens. 1: Skin sensitisation – Category 1</td>
</tr>
<tr>
<td>Skin Sens. 1A: Skin sensitisation – Category 1A</td>
</tr>
<tr>
<td>Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1</td>
</tr>
</tbody>
</table>

* Data modified compared to previous version.