

## Material Safety Data Sheet (MSDS)

ARG81207 Human Apolipoprotein AII ELISA Kit

Version: 2017/12/27

### 1. Product and Company Identification

**Product Catalog No:** ARG81207

**Product Name:** Human Apolipoprotein AII ELISA Kit

**Supplier:** Arigo Biolaboratories Corp.

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### 2. Composition / Information on Ingredients

**Description of the mixture:**

Mixture of nonhazardous substances, with additions listed below.

| Component number | Component name                         | Volume        | Safety Information                            |
|------------------|--|---------------|---|
| 1                | antibody-coated microplate             | 12 X 8 strips | No hazards                                    |
| 2                | Standard (10 µg/ml)                    | 50 µl         | Contains 0.02% Sodium Azide                   |
| 3                | 10X Wash Buffer                        | 100 ml        | Contains <0.02% Thimerosal                    |
| 4                | Conjugated-ApoAII Antibody concentrate | 20 µl         | Contains 0.02% Sodium Azide                   |
| 5                | HRP-Streptavidin concentrate           | 20 µl         | No hazards                                    |
| 6                | Assay Diluent                          | 50 ml         | Contains <0.02% Thimerosal                    |
| 7                | TMB substrate                          | 12 ml         | Contains 3,3',5,5'-tetramethylbenzidine (TMB) |
| 8                | STOP solution                          | 12 ml         | Contains 0.25M H <sub>2</sub> SO <sub>4</sub> |

**Hazardous ingredients:**

| Chemical name | CAS No. (EC No.) [Index No.]         | Amount in the mixture | Classification according to Regulation (EC) No 1272/2008 [CLP] (related to the concentrated form)       |  | Classification according to Directive 67/548/EEC (related to the concentrated form)                                      |
|---------------|--------------------------------------|-----------------------|---|--|--|
|               |                                      |                       | Hazard class/ Hazard categories   | Hazard-statement                                   |  |
| Thimerosal    | 54-64-8 ( 200-210-4 ) [080-004-00-7] | < 0.1%*               | Acute Tox. 2 *<br>Acute Tox. 1<br>Acute Tox. 2 *<br>STOT RE 2 *<br>Aquatic Acute 1<br>Aquatic Chronic 1 | H330<br>H310<br>H300<br>H373<br>**<br>H400<br>H410 | T+; R26/27/28:<br>C ≥ 2 %<br>T; R23/24/25: 0,5 %<br>≤ C < 2 %<br>Xn; R20/21/22:<br>0,05 % ≤ C < 0,5 %<br>R33: C ≥ 0,05 % |
| Sodium Azide  | 26628-22-8                           | ≤ 0.09%*              | Acute Tox. Oral 2   | H300; H400;  | T+;R28-32  |

|  |                                      |       |                                       |      |                   |
|--|--------------------------------------|-------|---------------------------------------|------|-------------------|
|  | [011-004-00-7]                       |       | Aquatic Acute 1<br>Aquatic Longterm 1 | H410 | N;R50/53          |
| sulphuric acid ... %   | 7664-93-9 (231-639-5) [016-020-00-8] | 2.5 % | Skin Corr. 1A                         | H314 | C; R35            |
| 3,3',5,5'-tetramethylbenzidine   | 54827-17-7 (259-364-6) [-]           | <0.1  | -                                     | -    | Xi, R36, R37, R38 |
| *Dilution is not classified as hazardous according to the European Regulation 67/548/EEC and 1999/45/EC or 1272/2008/EC. |                                      |       |                                       |      |                   |

Full text of R-, and H-phrases: see section 16.

### 3. Hazards Identification

#### Classification of the substance or mixture

Product is **not classified as hazardous** according to the European Regulation 67/548/EEC and 1999/45/EC or 1272/2008/EC.

#### Label elements

No labelling required.

#### Other hazards

#### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

### 4. First Aid Measures

#### Description of first aid measures

|                        |   |
|------------------------|---|
| General information    | No special measures required.                             |
| Following inhalation   | Supply fresh air; consult doctor in case of complaints.   |
| Following skin contact | Wash with plenty amounts of water.                        |
| Following eye contact  | Rinse opened eye for several minutes under running water. |
| Following swallowing   | If symptoms persist consult doctor.                       |

#### Most important symptoms and effects, both acute and delayed

No further relevant information available.

#### Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5. Fire-Fighting Measures

#### Extinguishing media

##### **Suitable extinguishing agents:**

No restriction; use any means suitable for extinguishing surrounding fire.

##### **Unsuitable extinguishing media:**

None

#### Special hazards arising from the substance or mixture

##### **Hazardous combustion products:**

No further relevant information available.

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**Advice for firefighters**

No special measures required.

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**6. Accidental Release Measures**

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**Personal precautions, protective equipment and emergency procedures**

Use appropriate personal protective equipment.

**Environmental precautions**

Dilute with plenty of water.

Do not allow to enter surface or ground water.

**Methods and material for containment and cleaning up**

Absorb with liquid-binding material.

Dispose contaminated material as waste according to section 13.

**Reference to other sections**

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

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**7. Handling and Storage**

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**Precautions for safe handling**

- Use all reagents in accordance with the relevant instruction for use.
- Observe laboratory safety regulations.
- Do not eat, drink, smoke or apply cosmetics in areas where kit reagents are handled.
- Wear disposable latex gloves when handling reagents.
- Handling should be done in accordance with the procedures defined by an appropriate national biohazard safety guideline or regulation.

**Conditions for safe storage, including any incompatibilities**

- No special requirements.
- Store all reagents as directed in the relevant instruction for use.

**Specific end use**

For professional in vitro diagnostic use only.

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**8. Exposure Controls / Personal Protection**

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**Control parameters**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Exposure controls**

Respiratory protection: Not required.

Hand protection: Protective gloves.

Eye protection: Goggles recommended during aspiration, dispensing or refilling.

Skin protection: Lab coat.

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**9. Physical and Chemical Properties**

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**Information on basic physical and chemical properties**

|   | Calibrator  | Enzyme Conjugate | Substrate Solution | Stop Solution |
|---|---|------------------|--------------------|---------------|
| <b>Appearance</b>                                   |   |                  |                    |               |
| The physical state                                  | Liquid  |                  |                    |               |
| Colour  | diverse (has no influence to the properties of the mixture) |                  |                    |               |
| <b>Odour</b>  | odourless   |                  |                    |               |
| <b>Odour threshold</b>                              | no data available   |                  |                    |               |
| <b>pH</b>   | 6.8 - 7.2   | 6.8              | 3.6 - 3.8          | < 1.0         |
| <b>Melting point/freezing point</b>                 | no data available   |                  |                    |               |
| <b>Initial boiling point and boiling range</b>      | no data available   |                  |                    |               |
| <b>Flash point</b>                                  | no data available   |                  |                    |               |
| <b>Evaporation rate</b>                             | no data available   |                  |                    |               |
| <b>Flammability (solid, gas)</b>                    | no data available   |                  |                    |               |
| <b>Upper/lower flammability or explosive limits</b> | no data available   |                  |                    |               |
| <b>Vapour pressure</b>                              | no data available   |                  |                    |               |
| <b>Vapour density</b>                               | no data available   |                  |                    |               |
| <b>Relative density</b>                             | no data available   |                  |                    |               |
| <b>Solubility(ies)</b>                              | no data available   |                  |                    |               |
| <b>Partition coefficient: n-octanol/water</b>       | no data available   |                  |                    |               |
| <b>Auto-ignition temperature</b>                    | no data available   |                  |                    |               |
| <b>Decomposition temperature</b>                    | no data available   |                  |                    |               |
| <b>Viscosity</b>                                    | no data available   |                  |                    |               |
| <b>Explosive properties</b>                         | no data available   |                  |                    |               |
| <b>Oxidising properties</b>                         | no data available   |                  |                    |               |

**Other information**

No other information available.

**10. Stability and Reactivity**

**Reactivity:** No data available.

**Chemical stability:** No data available.

**Possibility of hazardous reactions:** No data available.

**Conditions to avoid:** No conditions known.

**Incompatible materials:** No materials known.

**Hazardous decomposition products:** No dangerous decomposition products known.

**11. Toxicological Information****Information on toxicological effects**

**Acute toxicity:** No data available.

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**Irritation:** Due to its low pH value Substrate Solution and Stop Solution are irritant to the eye.

**Corrosivity:** Sulfuric acid induces tissue injury after contact.

**Sensitization:** No data available.

**Repeated dose toxicity:** No data available.

**Carcinogenicity:** No data available.

**Mutagenicity:** No data available.

**Toxicity for reproduction:** No data available.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

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## 12. Ecological Information

**Toxicity:** No further relevant information available.

**Persistence and degradability:** No further relevant information available.

**Bioaccumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.

**Results of PBT and vPvB assessment:** Not applicable.

**Other adverse effects:** No further relevant information available.

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## 13. Disposal Considerations

### Waste treatment methods

**Product:**

Recommendation: Dispose of waste according to applicable local, state, and federal regulations.

**Uncleaned packaging:**

Recommendation: Dispose of waste according to applicable local, state, and federal regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

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## 14. Transport Information

This product is not subject to official transport regulations.

**UN number:** None

**UN proper shipping name:** None

**Transport hazard class(es):** None

**Packing group:** None

**Environmental hazards:** None

**Special precautions for user:** Not applicable.

**Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.

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## 15. Regulatory Information

This Safety Data Sheet is according to:

**1907/2006/EC:** Registration, evaluation and authorization of chemicals regulation (REACH)

**1272/2008/EC:** Classification, labelling and packaging regulation (CLP, globally harmonized system GHS)  
replaces 67/548/EEC and 1999/45/EC, amending 1907/2006/EC

**453/2010/EC:** Compilation of safety data sheets regulation (SDS), amending 1907/2006/EC

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

No data available.

### Chemical safety assessment

Not applicable.

## 16. Other Information

### "H code" and "R Phrases" used in this Safety data sheet

| Reg. 1272/2008 | Dir. 67/548/EEC |  |
|----------------|-----------------|--|
| H300           | -               | Fatal if swallowed.  |
| H310           | -               | Fatal in contact with skin.  |
| H314           | -               | Causes severe skin burns and eye damage.   |
| H330           | -               | Fatal if inhaled.  |
| H373           | -               | May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard). |
| H400           | -               | Very toxic to aquatic life.  |
| H410           | -               | Very toxic to aquatic life with long lasting effects.  |
| -              | R28             | Very toxic if swallowed.   |
| -              | R29             | Contact with water liberates toxic gas.  |
| -              | R30             | Can become highly flammable in use.  |
| -              | R31             | Contact with acids liberates toxic gas.  |
| -              | R32             | Contact with acids liberates very toxic gas.   |
| -              | R33             | Danger of cumulative effects.  |
| -              | R35             | Causes severe burns.   |
| -              | R36             | Irritating to eyes.  |
| -              | R37             | Irritating to respiratory system.  |
| -              | R50/53          | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.   |
| -              | R20/21/22       | Harmful by inhalation, in contact with skin and if swallowed   |
| -              | R23/24/25       | Toxic by inhalation, in contact with skin and if swallowed.  |
| -              | R26/27/28       | Very toxic by inhalation, in contact with skin and if swallowed.   |

**Notice to reader:** To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**Data compared to the previous version altered.**