1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier
Trade Name: SHIKARI® S-ATAv4 ELISA
Reference Number: TR-AADAv4

1.2. Relevant identified uses of the substance or mixture and uses advised against
Enzyme immunoassay for the semi quantitative determination of total antibodies to adalimumab in human serum and plasma.

Kit Content (name and label reference)
- Microtiter Plate
- Dilution plate
- Immune complex control
- High Control - Negative Control
- Assay Buffer
- Dissociation Buffer
- Neutralization buffer
- Horse radish peroxidase-Conjugated Probe
- TMB Substrate Solution
- TMB Stop Solution
- Wash Buffer
- Adhesive Foil

1.3. Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Matriks Biyoteknoloji Sanayii ve Ticaret LTD. Şti.
Gazi Universitesi Gölbaşı Yerleşkesi Tekноплаза Бинасы
B Blok Zemin Kat BZ17 06830 – Gölbaşı/Ankara/TÜRKİYE
Phone: +90 312 485 42 94
Fax: +90 312 485 11 87
E-mail: info@matriksbiotek.com
Website: www.matriksbiotek.com

1.4. Emergency telephone number
+90 312 485 42 94 (During opening time: 09:00 – 18:00)
2. HAZARDS IDENTIFICATION


2.1. Classification of the substance or mixture

Classification in accordance with 1272/2008IEC (CLP/GHS): not classified as hazardous
Classification in accordance with 67/548IEEC and 1999/45IEC (DPD): not classified as hazardous

2.2. Label elements

This product is not under labelling according to Regulation (EC) n. 1272/2008

2.3. Other hazards

Results of PBT and vPvB assessment: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH (content < 0.1 % w/w), annex XIII; the substances in the mixture are not included in the Candidate List of SVHC.

Note: This product is intended for laboratory use by professional uses only. Use appropriate personal protective equipment while working with the reagents provided.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No (EC No)</th>
<th>Containing Conc. (%)</th>
<th>Classification according to regulation (EC) No 1272/2008 (CLP) (related to the concentrated form)</th>
<th>Pictogram, Signal Word Code(s)</th>
<th>Specific Conc. Limits, M-factors</th>
<th>Dir. 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric Acid (HCL)</td>
<td>7647-01-0 (231-595-7)</td>
<td>&lt; 5.0 %*</td>
<td>Skin Corr. 1B; STOT SE 3</td>
<td>GHS05 GHS07 Dgr</td>
<td>Skin Corr. 1B; H314: C≥25% Skin Irr. 2; H315: 10%≤C&lt;25 % Eye Irrit. 2, H319: 10%≤C&lt;25 % STOT SE 3; H355: C≥10%</td>
<td>C; R34-37: C25% Xi; R36/37/38: 10%≤C&lt;25%</td>
</tr>
</tbody>
</table>

Date of Issue: December 20, 2017
Replaces document dated: n/a
**Trade Name** | SHIKARI® S-ATAv4 ELISA  
**Reference Number** | TR-AADA4

* Dilution is not classified as hazardous according to the European Regulation 67/548/EEC and 1272/2008/EC

### 3.2. Mixtures

#### Standards and Controls, Assay Buffer

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No (EC No)</th>
<th>Containing Conc. (%)</th>
<th>Classification according to regulation (EC) No 1272/2008(CLP) (related to the concentrated form)</th>
<th>Pictogram, Signal Word Code(s)</th>
<th>Specific Conc. Limits, M-factors</th>
<th>Dir. 67/548/EEC</th>
</tr>
</thead>
</table>
| Sodium Azide | 26628-22-8 (247-852-1) | <0,001 % | Acute Tox. 2 (oral) 
Acute Tox. 1 (dermal) 
STOT RE 2  
Acute Aquatic 1 
Aquatic Chronic 1 | H300 
H310 
H373 
H400 
H410 | GHS06 GHS08 GHS09 | M-Factor: Aquatic Acute:1 | R23/24/25-36/37/38-50/53 |

* Dilution is not classified as hazardous according to the European Regulation 67/548/EEC and 1272/2008/EC

#### Horse radish peroxidase-Conjugated Probe

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No (EC No)</th>
<th>Containing Conc. (%)</th>
<th>Classification according to regulation (EC) No 1272/2008(CLP) (related to the concentrated form)</th>
<th>Pictogram, Signal Word Code(s)</th>
<th>Specific Conc. Limits, M-factors</th>
<th>Dir. 67/548/EEC</th>
</tr>
</thead>
</table>
| Proclin 150 | 55965-84-9 | <0,0015%* | Acute Tox. 3  
Skin Corr. 1B 
Skin Sens. 1 
Acute Aquatic 1 
Aquatic Chronic 1 | H301 
H311 
H314 
H317 
H331 
H400 

Proclin 150 is a mixture of substances of the components, 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1).
4. FIRST AID MEASURES

4.1. Description of first aid measures

General advise: No special measures required. Consult physician in case of complaints.

If inhaled: Supply fresh air.

In case of skin contact: Immediately flush skin with plenty of water. Cold water may be used. Remove contaminated clothing and shoes.

In case of eye contact: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used.

If swallowed: Rinse mouth with plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

There are no hazards under normal use conditions. Direct contact with eyes may cause slight and temporary irritation. Swallowing of larger amounts may lead to stomachache, vomiting or diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

No specific therapy known. Use supportive and symptomatic treatment.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water spray, alcohol resistant foam, dry-powder, carbon dioxide

Unsuitable extinguishing media: Direct water stream

5.2. Special hazards arising from the substance or mixture

To the best of our knowledge, no special hazards can be defined.

5.3. Advice for fire-fighters

No data available.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate protective gloves and clothes.

6.2. Environmental precautions

Dilute with plenty of water.

Do not allow to enter sewers/surface or ground water.

6.3. Methods and materials for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4. Reference to other sections
For personal protection see section 8.
For disposal see section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Use all reagents in accordance with the relevant package insert provided with the product.
Do not smoke, eat, drink or apply cosmetics in areas where kit reagents are handled.
Wear disposable latex gloves when handling reagents.
Never pipet by mouth and avoid contact of reagents and specimens with skin and mucous membranes.
Handling should be done in accordance with the procedures defined by an appropriate national biohazard safety guideline or regulation.
Use all reagents in accordance with the relevant package insert provided with the product.

7.2. Conditions for safe storage, including any incompatibilities
Store in tightly closed original packages or appropriately labeled alternate vessels. Store in dry, bunded areas.
Keep away from direct sunlight and heat sources. Recommended storage temperature: 2 - 8°C. Protect from freezing. Keep away from food and drinks. Keep away from acids and heavy metals. Keep out of the reach of children.

7.3. Specific end use(s)
For EU diagnostic product.
For the rest of the world ‘RESEARCH USE ONLY’

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS</th>
<th>Substance name</th>
<th>Indicative occupational exposure limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>26628-22-8</td>
<td>Sodium Azide</td>
<td>OEL mean (time-weighted 8 h): 0.1 mg.m&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OEL short term (LS min): 0.3 mg.m&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notation: skin</td>
</tr>
</tbody>
</table>

National work-place occupational exposure limits (only selected lands are displayed):

<table>
<thead>
<tr>
<th>CAS</th>
<th>Substance name</th>
<th>Occupational exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>26628-22-8</td>
<td>Sodium Azide</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Turkey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PEL: 0.1 mg.m&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NPEL-P: 0.3 mg.m&quot;</td>
</tr>
</tbody>
</table>
MATERIAL SAFETY DATA SHEET

According Regulation EC No. 1907/2006 (REACH)
Regulation EC No. 1272/2008 (CLP)
Commission Regulation EU No. 453/2010

<table>
<thead>
<tr>
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<th>SHIKARI® S-ATAv4 ELISA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Number</td>
<td>TR-AADAv4</td>
</tr>
</tbody>
</table>

**D - absorb through skin**

**I - irritating to mucosa (eye, airways) and skin**


Slovakia

NPEL mean: 0.1 mg.m”

NPEL short-term: 0.3 mg.m”

Note K: absorbed through skin

Government Regulation 300/2007 Coll. (SK), Appendix 1

Germany

AGW – time weighted mean: 0.2 mg.m”

Short –term factor: 2 (I)

1RGS-900

United Kingdom

TWA: 0.1 mg.m”

STEL: 0.3 mg.m”

France

TWA: 0.1 mg.m”

STEL: 0.3 mg.m”

Other recommended values: not set

<table>
<thead>
<tr>
<th>CAS</th>
<th>Substance name</th>
<th>OEL - equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicative biological limits (Turkey, 432/2003 Coll.): not set

<table>
<thead>
<tr>
<th>Substance</th>
<th>Evaluated as</th>
<th>Limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DNEL: not available for the mixture.
PNEC: not available for the mixture.

8.2. Exposure controls

General hygiene directives should be considered.

Keep away from food stuffs and beverages. Wash hands before breaks and at the end of the working day.

**Personal protective equipment:**

<table>
<thead>
<tr>
<th>Respiratory protection:</th>
<th>Not required.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin protection:</td>
<td>Protective gloves of nitrile or nature latex, satisfying the norm DIN EN 455</td>
</tr>
</tbody>
</table>

Date of Issue: December 20, 2017

Replaces document dated: n/a
9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>(a) APPEARANCE</th>
<th>(b) ODOR</th>
<th>(c) pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standards and Controls</td>
<td>Liquid, colorless</td>
<td>Odorless</td>
<td>7.4 ± 0.05</td>
</tr>
<tr>
<td>Horse radish peroxidase-Conjugated Probe</td>
<td>Liquid, red</td>
<td>Odorless</td>
<td>7.4 ± 0.05</td>
</tr>
<tr>
<td>Microtiter Plate</td>
<td>Solid, white</td>
<td>Odorless</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Assay Buffer</td>
<td>Liquid, blue</td>
<td>Odorless</td>
<td>7.4 ± 0.05</td>
</tr>
<tr>
<td>TMB Substrate Solution</td>
<td>Liquid, colorless</td>
<td>Odorless</td>
<td>3.6 – 3.8</td>
</tr>
<tr>
<td>TMB Stop Solution</td>
<td>Liquid, colorless</td>
<td>Odorless</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Wash Buffer</td>
<td>Liquid, colorless</td>
<td>Odorless</td>
<td>7.4 ± 0.05</td>
</tr>
</tbody>
</table>

For All Components

- (c) Odor threshold: No data available
- (e) Melting point/freezing point: No data available
- (f) Initial boiling point and range: No data available
- (g) Flash point: No data available
- (h) Evaporation rate: No data available
- (i) Flammability (solid, gas): No data available
- (j) Upper/lower flammability or explosive limits: No data available
- (k) Vapour pressure: No data available
- (l) Vapour density: No data available
- (m) Relative density: No data available
- (n) Solubility(ies): Fully miscible
- (o) Partition coefficient: n-octanol water: No data available
- (p) Auto-ignition temperature: Product is not selfigniting
- (q) Decomposition temperature: No data available
- (r) Viscosity: No data available
- (s) Explosive properties: Product does not present an explosion hazard
- (t) Oxidising properties: No data available

9.2. Other information

No other information available.

Date of Issue: December 20, 2017
Replaces document dated: n/a
10. STABILITY AND REACTIVITY

10.1. Reactivity
Not reactive under normal conditions of storage and manipulation. Sodium azide has been reported to form lead or copper azide in laboratory plumbing (heavy metals) which may explode on percussion. Treatment of sodium azide with strong acids gives hydrazoic acid, which is also extremely toxic.

10.2. Chemical stability
Mixture is chemically stable under normal conditions of storage and manipulation. Overheating may cause thermal decomposition.

10.3. Possibility of hazardous reactions
Sodium azide has been reported to form lead or copper azide in laboratory plumbing (heavy metals) which may explode on percussion.

10.4. Conditions to avoid
Stable under normal conditions. Keep away from direct sunlight and heat sources. Do not mix with strong acids and heavy metals.

10.5. Incompatible materials
Strong acids, heavy metals, halogenated hydrocarbons.

10.6. Hazardous decomposition products
Material does not decompose at ambient temperatures. Incomplete combustion and thermolysis may produce toxic, irritating and flammable decomposition products (such as carbon monoxide, carbon dioxide, sooth, aldehydes and other products of organic compounds decomposition, sulfur / nitrogen oxides).

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

a) Acute toxicity:
Based on available data, the classification criteria are not met. Based on composition, the mixture has low acute toxicity and no adverse effects for human health are expected under applicable conditions of exposure sodium azide.

b) Skin corrosion/irritation:
Based on available data, the classification criteria are not met. Prolonged or repeated skin contact may cause mild irritation and dermatitis (skin inflammation). However, these effects do not required classification.

c) Serious eye damage/irritation:
Based on available data, the classification criteria are not met. Direct contact with eyes may cause slight and temporary irritation. However, these effects do not required classification.

d) Respiratory or skin sensitization:
Based on available data, the classification criteria are not met. Compounds have no sensitization effects.
11. GESTATIONAL TOXICITY
Based on available data, the classification criteria are not met. Compounds have no potential for teratogenic activity.

12. ECOLOGICAL INFORMATION
12.1. Toxicity: No data available.
12.2. Persistence and degradability: No data available.
12.4. Mobility in soil: No data available.
12.5. Results of PBT and vPvB assessment: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII (content < 0,1 % w/w); the substances in the mixture are not included in the Candidate List of SVHC.
12.6. Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS
13.1. Waste treatment methods

Product:
Waste should be disposed of in accordance with federal, state and local environmental control regulations. Must not be composited together with household garbage.

Uncleaned packaging:
Waste should be disposed of in accordance with federal, state and local environmental control regulations. Must not be composited together with household garbage.

General notes:
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.

Date of Issue: December 20, 2017
Replaces document dated: n/a
14. TRANSPORT INFORMATION
The mixture is not classified as dangerous for transport according to ADR/RID/IMDG/ICAO/IATA/DGR

14.1. UN number: None
14.2. Un proper shipping name: None
14.3. Transport hazard class(es): None
14.4. Packing group: None
14.5. Environmental hazards: None
14.6. Special precautions for user: Not applicable.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION
This Safety Data Sheet is according to:
1907/2008/EC Registration, evaluation and authorization of chemicals regulation (REACH)

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
No data available.

15.2. Chemical safety assessment
No data available.

16. OTHER INFORMATION
“H code” and “R Phrases” used in this Safety Data Sheet
H301  Toxic if swallowed.
H311  Toxic in contact with skin.
H314  Causes severe skin burns and eye damage.
H315  Causes skin irritation.
H317  May cause an allergic skin reaction.
H319  Cause serious eye irritation.
H331  Toxic if inhaled.
H335  May cause respiratory irritation.
H400  Very toxic to aquatic life.
H410  Very toxic to aquatic life with long lasting effects.
R23/24/25  Toxic by inhalation, in contact with skin and if swallowed.
R34  Causes burns.
R37  Irritating to respiratory system.
R36/37/38  Irritating to eyes, respiratory system and skin.
R43  May cause sensitisation by skin contact.
**MATERIAL SAFETY DATA SHEET**

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- **R50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**“P statements” and “S Phrases” used in this Safety Data Sheet**

- **S26** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- **S28** After contact with skin, wash immediately with plenty of (to be specified by the manufacturer).
- **S36/37** Wear suitable protective clothing and gloves.
- **S39** Wear eye/face protection.
- **S45** In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).
- **S60** This material and its container must be disposed of as hazardous waste.
- **S61** Avoid release to the environment. Refer to special instructions/safety data sheet.