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

1.1 Product identifiers
- **Product name**: Aryl-Sulfatase, from *recombinant E.Coli*
- **Product Number**: AS
- **Brand**: Kura Biotec

1.2 Relevant identified uses of the substance or mixture and uses advised against
- **Identified uses**: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet
- **Company**: Kura Biotec Spa
  - Gnechen J2
  - Puerto Varas
  - Chile
- **Telephone**: +56 8233 6932
- **E-mail address**: inquiries@kurabiotec.com

1.4 Emergency telephone number
- **Emergency Phone #**: +569 8233 6932

2. HAZARDS IDENTIFICATION

2.1 GHS Classification
- Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements
- **Pictogram**: none
- **Signal word**: none
- **Hazard statement(s)**: none
- **Precautionary statement(s)**: none
- Not a hazardous substance or mixture.

2.3 Other hazards – none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures
- **Synonyms**: Aryl-sulfatase
  - Phenolsulfatase
  - Aryl-sulfate sulfohydrolase

  - none

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements mentioned in this Section, see Section 16.
4. FIRST AID MEASURES

4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

no data available

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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

no data available

6.4 Reference to other sections

For disposal see section 13.
7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Recommended storage temperature: -20 °C

7.3 Specific end uses
Apart from the uses mentioned in section 1.3 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Occupational Exposure Limits
We are not aware of any national exposure limit.

8.2 Exposure controls
Appropriate engineering controls
General industrial hygiene practice.

Personal protective equipment

Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
a) Appearance Form: Form: liquid
b) Odour: No data available
<table>
<thead>
<tr>
<th>Property</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>c) Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>d) pH</td>
<td>No data available</td>
</tr>
<tr>
<td>e) Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>f) Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>g) Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>h) Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>j) Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>k) Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>l) Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>m) Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>n) Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>o) Partition coefficient: noctanol/ water</td>
<td>No data available</td>
</tr>
<tr>
<td>p) Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>q) Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>r) Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>s) Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>t) Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2 Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity
No data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
10.4 Conditions to avoid
No data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - No data available
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION
11.1 Information on toxicological effects
   Acute toxicity
   no data available

   Skin corrosion/irritation
   no data available

   Serious eye damage/eye irritation
   no data available

   Respiratory or skin sensitization
   no data available

   Germ cell mutagenicity
   no data available

   Carcinogenicity
   IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

   Reproductive toxicity
   no data available

   Specific target organ toxicity - single exposure
   no data available

   Specific target organ toxicity - repeated exposure
   no data available

   Aspiration hazard
   no data available

   Additional Information
   RTECS: Not available
   To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

12. ECOLOGICAL INFORMATION
   12.1 Toxicity
   no data available
12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 3373  IMDG: 3373  IATA-DGR: 3373

14.2 UN proper shipping name
ADR/RID: BIOLOGICAL SUBSTANCE, CATEGORY B
IMDG: BIOLOGICAL SUBSTANCE, CATEGORY B
IATA-DGR: Biological substance, Category B

14.3 Transport hazard class(es)
ADR/RID: 6.2  IMDG: 6.2  IATA-DGR: 6.2 (UN33)

14.4 Packaging group
ADR/RID: -  IMDG: -  IATA: -

14.5 Environmental hazards
ADR/RID: no  IMDG Marine pollutant: no  IATA: no

14.6 Special precautions for user
no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

Standard for the Uniform Scheduling of Medicines and Poisons
no data available

Carcinogen classification under WHS Regulation 2011, Schedule 10
AICS: Not in compliance with the inventory - Non hazardous component(s) liquid

DSL: This product contains the following components that are not on the Canadian DSL nor NDSL. - Non hazardous component(s) liquid

ENCS: Not in compliance with the inventory - Non hazardous component(s) liquid

IECSC: Not in compliance with the inventory - Non hazardous component(s) liquid

ISHL: Not in compliance with the inventory - Non hazardous component(s) liquid

KECI: Not in compliance with the inventory - Non hazardous component(s) liquid

NZIoC: Not in compliance with the inventory - Non hazardous component(s) liquid

PICCS: Not in compliance with the inventory - Non hazardous component(s) liquid

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Further information

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