SAFETY DATA SHEET (SDS)

Revision Date: 2015-09-18

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME CATALOG #

Transferrin, R-1 KAI-023 (R-1) or KAI-101 (R-1)

Intended Use: For the quantitative determination of human Transferrin in serum by immunoturbidimetric

in vitro assay.

MANUFACTURER INFORMATION

Manufacturer: KAMIYA BIOMEDICAL COMPANY

Address: 12779 Gateway Drive Phone: +1 206-575-8068

2. HAZARDS IDENTIFICATION

| GHS Classification: | Does not fulfill criteria for classification as dangerous or hazardous |
|---------------------------|--|
| Hazard Symbol: | None |
| Signal Word: | None |
| Hazard Statements: | None |
| Precautionary Statements: | None |

3. COMPOSITION / INFORMATION ON INGREDIENTS

Single substance or Mixture: Mixture

| Ingredient | CAS# | Amount |
|---------------------------|------------|---------|
| Sodium Azide | 26628-22-8 | < 0.1 % |
| Polyoxyethylenealkylether | 84133-50-6 | 1.0 % |

4. FIRST-AID MEASURES

| Inhalation: | Get fresh air. If experiencing difficulty breathing, obtain medical attention. |
|--|---|
| Skin Contact: | Wash off skin thoroughly with water. Remove contaminated clothing and wash |
| Skill Colliact. | before re-use. In cases of redness or itching, get medical attention. |
| Eye Contact: | Rinse eyes immediately with water for several minutes with eyelids open. Remove |
| Eye Contact: | contact lenses, if present and easy to do. Repeat rinsing. Get medical attention. |
| If conscious, wash out mouth thoroughly with water then drink 1-2 glas | |
| Ingestion: | water. Get medical attention. Do not induce vomiting without medical advice. |

5. FIRE-FIGHTING MEASURES

| Extinguishing Media: | No restrictions |
|-------------------------------|--|
| Specific Hazards: | No fire or explosion hazards. Packaging material will burn in a fire. |
| Special Protective Equipment: | Wear self-contained breathing apparatus and protective suit, if necessary. |

6. ACCIDENTAL RELEASE MEASURES

| Personal Precautions: | Wear proper protective equipment to avoid adhering to skin. |
|--|--|
| Environmental Precautions: | Do not wash away into sewers, watercourse, or rivers. If material has |
| | entered surface drains, it may be necessary to inform local authorities. |
| Methods and Materials for Containment and Cleaning Up: | After absorbing liquid with absorbent material e.g. cotton, wool or paper |
| | towel, flush the spill site with plenty of water. Keep in suitable, closed |
| | containers for disposal. |

7. HANDLING AND STORAGE

| Handling: | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. |
|-----------|--|
| Storage: | Store between +2 and +8 degrees C, tightly closed. |
| Warning: | This material contains < 0.1 % sodium azide as a preservative. Sodium Azide forms an explosive |
| warning. | compound by contact with lead and copper plumbing. Flush with copious amounts of water. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Respiratory Protection: | None |
|-------------------------|---|
| Eye Protection: | Protective glasses |
| Hand Protection: | Protective gloves. Wash hands after use. |
| Skin Protection: | Wear suitable, impermeable protective clothing. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | Liquid |
|---|------------------------------|
| Color: | Colorless |
| Odor / Odor Threshold: | Odorless |
| pH: | 7.55 - 7.65 (at 25°C) |
| Melting Point / Freezing Point: | No information available |
| Initial Boiling Point and Boiling Range: | No information available |
| Flash Point: | Not applicable |
| Evaporation Rate: | No information available |
| Upper / Lower Flammability or Explosive Limits: | No information available |
| Vapor Pressure: | No information available |
| Vapor Density: | No information available |
| Relative Density: | No information available |
| Solubility(ies): | Miscible in water |
| Auto-ignition: | Product is not self-igniting |
| Decomposition Temperature: | No information available |
| Viscosity: | No information available |

10. STABILITY AND REACTIVITY

| Stability: | Stable under recommended storage conditions. | |
|----------------------|--|--|
| Hazardous Reactions: | Sodium Azide forms an explosive compound by contact with metals. | |

11. TOXICOLOGICAL INFORMATION

This product is a mixture that contains very low concentrations of the following substances. Here are details for the substances in pure form.

| Sodium Azide | |
|--------------------------------------|--|
| | Oral LD50: 27 mg/kg (Rat) |
| Acute Toxicity: | Dermal LD50: 20 mg/kg (Rabbit) |
| | Inhalation LC50: N/A |
| Skin Irritation / Corrosion: | No information available |
| Serious Eye Damage / Eye Irritation: | No information available |
| Respiratory or Skin Sensitization: | No information available |
| Germ Cell Mutagenicity: | No information available |
| Carcinogenicity: | No information available |
| Reproductive Toxicity: | No information available |
| STOST - Single Exposure: | No information available |
| STOST - Repeated Exposure: | No information available |
| Target Organ Effects: | Blood forming system, cardiovascular system (by inhalation), blood |
| | system, autonomic nervous system, blood (by inhalation) |
| Aspiration Hazard: | No information available |
| CMR Effects: | No information available |

| Polyoxyethylenealkylether | |
|---------------------------|--------------------------------|
| Acute Toxicity: | Oral LD50: 18,000 mg/kg (Rat) |
| | Dermal LD50: 2,000 mg/kg (Rat) |

12. ECOLOGICAL INFORMATION

| Toxicity: | Sodium azide: LC50 (96h) 0.8 mg/L (Oncorhynchus mykiss) |
|--------------------------------|--|
| Persistence and Degradability: | No information available |
| Bioaccumulative Potential: | Sodium Azide: Harmful to aquatic life with long lasting effects. |
| Mobility in Soil: | No information available |
| Hazard to the Ozone Layer: | No information available |

13. DISPOSAL CONSIDERATIONS

| Product: | The product has to be disposed of in accordance with local regulations. Do not wash away into surface water or sanitary sewer systems. |
|-------------------------|---|
| Contaminated Packaging: | After washing with water, the empty containers should be taken to an approved waste handling site for disposal. |

14. TRANSPORT INFORMATION

This product is considered to be non-hazardous for transport.

| UN Number: | N/A |
|--------------------------|-----|
| UN Proper Shipping Name: | N/A |
| Transport Hazard Class: | N/A |
| Packing Group: | N/A |

15. REGULATORY INFORMATION

Regulatory information with regard to this preparation in your country or region should be examined on your own responsibility.

16. OTHER INFORMATION / DISCLAIMER

This product is for *in vitro* use only. It is not to be used internally in humans or animals.

The information, data, and recommendations contained herein are based upon information believed by KAMIYA BIOMEDICAL COMPANY (KBC) to be accurate, but does not purport to be all-inclusive and shall be used only as a guide. KBC neither warrants the accuracy of this information nor assumes any legal responsibility in connection with its dissemination. KBC shall not be held liable for any damage resulting from handling or from contact with the above product.

It is the user's responsibility to determine the suitability of this information and the adoption of necessary safety precautions. All materials and mixtures may present unknown hazards and should be used with caution. When necessary or appropriate, independent opinions regarding the risk of handling or exposure should be obtained from trained professionals.

We reserve the right to revise this document periodically, as new information becomes available.

SAFETY DATA SHEET (SDS)

Revision Date: 2015-09-18

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME CATALOG #

Transferrin, R-2 KAI-023 (R-2) or KAI-101 (R-2)

Intended Use: For the quantitative determination of human Transferrin in serum by immunoturbidimetric

in vitro assay.

MANUFACTURER INFORMATION

Manufacturer: KAMIYA BIOMEDICAL COMPANY

Address: 12779 Gateway Drive Phone: +1 206-575-8068

Seattle, WA 98168 FAX: +1 206-575-8094 U.S.A. Website: www.k-assay.com

2. HAZARDS IDENTIFICATION

| GHS Classification: | Does not fulfill criteria for classification as dangerous or hazardous |
|---------------------------|--|
| Hazard Symbol: | None |
| Signal Word: | None |
| Hazard Statements: | None |
| Precautionary Statements: | None |

3. COMPOSITION / INFORMATION ON INGREDIENTS

Single substance or Mixture: Mixture

| Ingredient | CAS# | Amount |
|---------------------------|------------|---------|
| Sodium Azide | 26628-22-8 | < 0.1 % |
| Polyoxyethylenealkylether | 84133-50-6 | 2.0 % |

4. FIRST-AID MEASURES

| Inhalation: | Get fresh air. If experiencing difficulty breathing, obtain medical attention. | |
|-----------------|---|--|
| Skin Contact: | Wash off skin thoroughly with water. Remove contaminated clothing and wash | |
| Skill Colliact. | before re-use. In cases of redness or itching, get medical attention. | |
| Eye Contact: | Rinse eyes immediately with water for several minutes with eyelids open. Remove | |
| Eye Contact: | contact lenses, if present and easy to do. Repeat rinsing. Get medical attention. | |
| Ingestion: | If conscious, wash out mouth thoroughly with water then drink 1-2 glasses of | |
| ingestion. | water. Get medical attention. Do not induce vomiting without medical advice. | |

5. FIRE-FIGHTING MEASURES

| Extinguishing Media: | No restrictions |
|-------------------------------|--|
| Specific Hazards: | No fire or explosion hazards. Packaging material will burn in a fire. |
| Special Protective Equipment: | Wear self-contained breathing apparatus and protective suit, if necessary. |

6. ACCIDENTAL RELEASE MEASURES

| Personal Precautions: | Wear proper protective equipment to avoid adhering to skin. |
|--|--|
| Environmental Precautions: | Do not wash away into sewers, watercourse, or rivers. If material has |
| | entered surface drains, it may be necessary to inform local authorities. |
| Methods and Materials for Containment and Cleaning Up: | After absorbing liquid with absorbent material e.g. cotton, wool or paper |
| | towel, flush the spill site with plenty of water. Keep in suitable, closed |
| Containment and Cleaning Op. | containers for disposal. |

7. HANDLING AND STORAGE

| Ha | andling: | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. | |
|----|--|---|--|
| S | Storage: | ge: Store between +2 and +8 degrees C, tightly closed. | |
| | This material contains < 0.1 % sodium azide as a preservative. Sodium Azide forms an explosive | | |
| | compound by contact with lead and copper plumbing. Flush with copious amounts of water. | | |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Respiratory Protection: | None |
|-------------------------|---|
| Eye Protection: | Protective glasses |
| Hand Protection: | Protective gloves. Wash hands after use. |
| Skin Protection: | Wear suitable, impermeable protective clothing. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | Liquid |
|---|------------------------------|
| Color: | Slightly yellow |
| Odor / Odor Threshold: | Odorless |
| pH: | No information available |
| Melting Point / Freezing Point: | No information available |
| Initial Boiling Point and Boiling Range: | No information available |
| Flash Point: | Not applicable |
| Evaporation Rate: | No information available |
| Upper / Lower Flammability or Explosive Limits: | No information available |
| Vapor Pressure: | No information available |
| Vapor Density: | No information available |
| Relative Density: | No information available |
| Solubility(ies): | Miscible in water |
| Auto-ignition: | Product is not self-igniting |
| Decomposition Temperature: | No information available |
| Viscosity: | No information available |

10. STABILITY AND REACTIVITY

| Stability: | Stable under recommended storage conditions. | |
|----------------------|--|--|
| Hazardous Reactions: | Sodium Azide forms an explosive compound by contact with metals. | |

11. TOXICOLOGICAL INFORMATION

This product is a mixture that contains very low concentrations of the following substances. Here are details for the substances in pure form.

| Sodium Azide | |
|--------------------------------------|--|
| | Oral LD50: 27 mg/kg (Rat) |
| Acute Toxicity: | Dermal LD50: 20 mg/kg (Rabbit) |
| | Inhalation LC50: N/A |
| Skin Irritation / Corrosion: | No information available |
| Serious Eye Damage / Eye Irritation: | No information available |
| Respiratory or Skin Sensitization: | No information available |
| Germ Cell Mutagenicity: | No information available |
| Carcinogenicity: | No information available |
| Reproductive Toxicity: | No information available |
| STOST - Single Exposure: | No information available |
| STOST - Repeated Exposure: | No information available |
| Target Organ Effects: | Blood forming system, cardiovascular system (by inhalation), blood |
| | system, autonomic nervous system, blood (by inhalation) |
| Aspiration Hazard: | No information available |
| CMR Effects: | No information available |

| Polyoxyethylenealkylether | | |
|---------------------------|--|--|
| Acute Toxicity: | Oral LD50: 18,000 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (Rat) | |
| _ | Definal LD50. 2,000 flig/kg (Rat) | |

12. ECOLOGICAL INFORMATION

| Toxicity: | Sodium azide: LC50 (96h) 0.8 mg/L (Oncorhynchus mykiss) |
|--------------------------------|--|
| Persistence and Degradability: | No information available |
| Bioaccumulative Potential: | Sodium Azide: Harmful to aquatic life with long lasting effects. |
| Mobility in Soil: | No information available |
| Hazard to the Ozone Layer: | No information available |

13. DISPOSAL CONSIDERATIONS

| Product: | The product has to be disposed of in accordance with local regulations. Do not wash away into surface water or sanitary sewer systems. |
|-------------------------|---|
| Contaminated Packaging: | After washing with water, the empty containers should be taken to an approved waste handling site for disposal. |

14. TRANSPORT INFORMATION

This product is considered to be non-hazardous for transport.

| UN Number: | N/A |
|--------------------------|-----|
| UN Proper Shipping Name: | N/A |
| Transport Hazard Class: | N/A |
| Packing Group: | N/A |

15. REGULATORY INFORMATION

Regulatory information with regard to this preparation in your country or region should be examined on your own responsibility.

16. OTHER INFORMATION / DISCLAIMER

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