

SAFETY DATA SHEET (SDS)

Revision Date: 2015-06-08

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

RF, R-2

CATALOG

KAI-031 (R-2)

Synonyms: Rheumatoid Factor, R-2

Intended Use: For the quantitative determination of human RF (Rheumatoid Factor) in serum by immunoturbidimetric *in vitro* assay.


MANUFACTURER INFORMATION

Manufacturer: **KAMIYA BIOMEDICAL COMPANY**

Address: 12779 Gateway Drive
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U.S.A.

Phone: +1 206-575-8068
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2. HAZARDS IDENTIFICATION

GHS Classification:	Skin sensitization: Category 1 Carcinogenicity: Category 2 Specific target organ toxicity (repeated exposure): Category 2 (thyroid gland)
Hazard Symbol:	
Signal Word:	Warning
Hazard Statements:	H317 - May cause an allergic skin reaction H351 - Suspected of causing cancer H373 - May cause damage to organ (thyroid gland) through prolonged or repeated exposure
Precautionary Statements:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Get medical advice/attention if you feel unwell. Specific treatment (see "4. FIRST-AID MEASURES" on this sheet): IF ON SKIN: Wash with plenty of water. If exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Store locked up. Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Single substance or Mixture: Mixture

Ingredient	CAS #	Amount
Sodium Azide	26628-22-8	< 0.1 %
Thiourea	62-56-6	2.3 %
Glycerol	56-81-5	1 - 5 %

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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 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 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 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 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 or 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	
Acute Toxicity:	Oral LD50: 27 mg/kg (Rat) 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

Thiourea	
Acute Toxicity:	GHS classification: Category 4 (Oral) Oral LD50: N/A Dermal LD50: 6,810 mg/kg (Rat) Inhalation LC50 (4h): > 0.9 mg/L (Rat)
Serious Eye Damage / Eye Irritation:	GHS classification: Category 2B Based on the NITE GHS classification results.
Respiratory or Skin Sensitization:	Respiratory sensitization: No data. Skin sensitization to humans (CICAD No.49 (2003)): GHS classification: Category 1
Carcinogenicity:	GHS classification: Category 2 Based on the NITE GHS classification results. NTP: Reasonably Anticipated. Japan: Group 2B.
Reproductive Toxicity:	GHS classification: Category 2 Based on the NITE GHS classification results.
STOST - Single Exposure:	GHS classification: Category 3 Respiratory tract irritation Based on the NITE GHS classification results.
STOST - Repeated Exposure:	GHS classification: Category 1 thyroid gland. Based on the NITE GHS classification results.

Glycerol	
Acute Toxicity:	No information available
Skin irritation / corrosion:	No information available
Serious Eye Damage / Eye Irritation:	No information available
Respiratory or Skin Sensitization:	No information available
Reproductive 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
Aspiration hazard:	No information available

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12. ECOLOGICAL INFORMATION

Toxicity:	Sodium azide: LC50 (96h) 0.8 mg/L (<i>Oncorhynchus mykiss</i>) Thiourea: LC50 (96h) 600 mg/L (<i>Pimephales promelas</i>) LC50 (96h) 1,000 mg/L (<i>Brachydanio rerio</i>) EC50 (72h) 3.8 mg/L (<i>Desmodesmus subspicatus</i>) EC50 (96h) 6.8 mg/L (<i>Desmodesmus subspicatus</i>) EC50 (48h) 35 mg/L (<i>Daphnai magna</i>) Glycerin: LC50 (24h) >5,000 mg/L (Goldfish) LC50 (96h) 184,000 mg/L (Goldfish)
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.