MATERIAL SAFETY DATA SHEET

Product name: TFRC (Human) ELISA Kit

Catalog number: KA0039

1. Composition/Information on Ingredients

Component	Size
Antibody Coated Microtiter Strips	96 wells
Conjugate solution	13 ml
Set of standards	6x0.1 ml
Quality Control HIGH	0.05 ml
Quality Control LOW	0.05 ml
Dilution Buffer	2 x 13 ml
Biotin-Ab Diluent	13 ml
Wash Solution Conc. (10x)	100 ml
Substrate Solution	13 ml
Stop Solution	13 ml

2. Hazards Identification

Known Hazardous Components	CAS Number	Percent
2-methyl-4-isothiazolin-3-one:	2682-20-4	
Conjugate Solution		0.02 %
Set of Standards		0.02 %
Substrate Solution		0.02 %

Known Hazardous Components	CAS Number	Percent
5-Bromo-5-nitro-1,3-dioxane:	30007-47-7	
Conjugate Solution		0.02%
Set of Standards		0.02%
Quality Controls (HIGH, LOW)		
Dilution Buffer		

Known Hazardous Components	CAS Number	Percent
5-Chloro-2-methyl-4-isothiazolin-3-one:	26172-55-4	

Conjugate Solution		< 0.001 %
Quality Controls (HIGH, LOW)		< 0.001 %
Substrate Solution		< 0.001 %

Known Hazardous Components	CAS Number	Percent
Thimerosal:	54-64-8	
Wash Solution Conc. (10x)		0.05 %

Known Hazardous Components	CAS Number	Percent
Potassium hexacyanoferrate(II) trihydrate :	14459-95-1	
Dilution Buffer		0.3 %

Known Hazardous Components	CAS Number	Percent
3,3',5,5'-Tetramethylbenzidine:	54827-17-7	
Substrate Solution		0.036 %

Known Hazardous Components	CAS Number	Percent
Hydrogen peroxide:	7722-84-1	
Substrate Solution		< 0.002 %

Known Hazardous Components	CAS Number	Percent
Sulfuric acid:	7664-93-9	
Stop Solution		1.96 %

3. First Aid Measures

First aid personnel should ensure self-protection.

General information:	Immediately rinse with soap and plenty of water. Use personal protective working aids.
In case of skin contact:	The contaminated clothing and footwear must be taken off; the affected skin must be rinsed with plenty of water. Use soap to completely remove the substance. When irritation persists, seek medical advice.
In case of eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
In case of ingestion:	Rinse the mouth; administer a big amount of water to dilute the substance. In the case of unconsciousness, never administer anything orally. Seek medical advice.
In case of inhalation:	Transport the affected person into the open air. When there are respiratory complaints, oxygen must be administered. When irritation persists, seek medical advice.

4. Fire Fighting Measures

- Suitable fire-extinguishing media: Carbon dioxide, dry powder, foam, water.
- Thermal decomposition: No thermal decomposition degradation products are expected.
- Special hazards: None.
- Special protective means for firemen: None.

5. Accidental Release Measures

- Safety measures to protect humans: Avoid contact with skin and eyes.
- Environmental safety measures: Avoid penetration into sewerage systems, surface and ground water. Avoid soil pollution.
- Recommended cleaning and disposal methods: Cover with suitable absorbing material. After removing the substance, rinse the spot of spilling thoroughly with water and soap.

6. Handling and Storage

Handling

Avoid contact with skin, eyes and clothing. Use suitable protective means to work with the substance.

Storage

Store at temperatures between + 2 and + 8℃ in a dry and dark place.

7. Exposure controls/personal protection

Technical measures: Do not eat, drink and smoke when working with the kit. Use the kit only in rooms enabling good ventilation.

Local exhaustion is necessary, general (forced) exhaustion is recommended.

Personal protective means – protection of respiratory organs: None

Personal protective means – eye protection: Protective glasses

Personal protective means – hand protection: Protective gloves (wash your hands before and after work)

Personal protective means – body protection: Protective clothing

8. Physical and Chemical Properties

State (at 20° C):

Solid	Antibody coated Microtiter Strips
Liquid	Conjugate Solution, Set of Standards, Quality controls (HIGH, LOW), Dilution Buffer, Wash Solution Conc. (10x), Substrate Solution, Stop Solution
Colour:	
Caramel to reddish:	Conjugate Solution, Quality controls (HIGH, LOW)

Yellowish:	Dilution Buffer
Lightly bluish	Substrate Solution
Colourless:	Set of Standards, Wash Solution Conc. (10x), Stop Solution
Odour	Odourless
pH	Stop solution: < 1
	Others: 6.8 - 7.4
Melting temperature:	N/A
Boiling temperature:	N/A
Flash point (°C):	N/A
Flammability:	N/A
Vapour tension (°C):	N/A
Relative density:	N/A
Water solubility:	Soluble.

9. Stability and Reactivity

Conditions to be avoided: Heat

Substances and materials with which the product is not allowed to get in touch: Acids

Hazardous decomposition products: Not known

Other data: No hazardous polymerization

10. Toxicological Information

Not available.

11. Ecological information

Not available.

12. Disposal guidelines

The manner of disposing the substance/preparation:

Mix or dissolve the material in a combustible solvent and burn up in a facility whose equipment matches all regulations in effect.

Every waste disposal must be carried out in coincidence with national and local legislation or administrative regulations respectively.

Packages: In coincidence with local legislation, or administrative regulations respectively.

13. Transport information

Disposal must be made in accordance with federal, state and local environmental regulations.

14. Regulatory information

Not available.

15. Other

The material safety data sheet contains data necessary to ensure safety and health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a chemical substance and can be solely used by persons with chemical education at their own risk. This kit is designed for biomedical research. The manufacturer has no responsibility for damage caused by unsuitable use and by disrespecting the enclosed working instructions.

The above-stated information cannot be considered as complete and must be understood to be only a methodical instruction.