SAFETY DATA SHEET

Multisciences Human Transferrin/TF ELISA Kit

Section 1. Identification

GHS product identifier Code: Multisciences Human Transferrin/TF ELISA Kit, EK1201
Other means of identification: Not available
Trade name: Human Transferrin/TF ELISA Kit
Supplier/Manufacturer 108 Xiang Yuan Road, Gongshu Intellect Information Industry Park, Hangzhou
In case of emergency: Multisciences: 400-6721-600

Section 2. Hazards identification

OSHA/HCS status:	Multisciences anti-Human TF detect antibody(100X)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Multisciences Human TF Standard (lyophilized)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Multisciences Substrate Reagent	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Multisciences Stop Solution	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture:	Multisciences anti-Human TF detect antibody(100X)	Not classified.
	Multisciences Human TF Standard (lyophilized)	Not classified.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not classified.
	Multisciences Substrate Reagent	Not classified.
	Multisciences Stop Solution	Not classified.
GHS label elements Signal word	Multisciences anti-Human TF detect antibody(100X)	No signal word.
	Multisciences Human TF Standard (lyophilized)	No signal word.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No signal word.
	Multisciences Substrate Reagent	No signal word.
	Multisciences Stop Solution	No signal word.
Hazard statements	Multisciences anti-Human TF detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human TF Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Substrate Reagent	No known significant effects or critical hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.
Precautionary statements General	Multisciences anti-Human TF detect antibody(100X)	Not applicable.
	Multisciences Human TF Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.

Prevention	Multisciences anti-Human TF detect antibody(100X)	Not applicable.
	Multisciences Human TF Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Response	Multisciences anti-Human TF detect antibody(100X)	Not applicable.
	Multisciences Human TF Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Storage	Multisciences anti-Human TF detect antibody(100X)	Not applicable.
	Multisciences Human TF Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Disposal	Multisciences anti-Human TF detect antibody(100X)	Not applicable.
	Multisciences Human TF Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Supplemental label elements	Multisciences anti-Human TF detect antibody(100X)	None known.
	Multisciences Human TF Standard (lyophilized)	None known.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	Multisciences Substrate Reagent	None known.
	Multisciences Stop Solution	None known.
Hazards not otherwise classified	Multisciences anti-Human TF detect antibody(100X)	None known.
	Multisciences Human TF Standard (lyophilized)	None known.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	Multisciences Substrate Reagent	None known.
	Multisciences Stop Solution	None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture

Ingredient name	%	CAS number
Multisciences Human TF Standard	99.9-100	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	Multisciences anti-Human TF detect antibody(100X)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Multisciences Human TF Standard (lyophilized)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

	Multisciences Substrate Reagent	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Multisciences Stop Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Multisciences anti-Human TF detect antibody(100X)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Multisciences Human TF Standard (lyophilized)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Multisciences Substrate Reagent	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Multisciences Stop Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	Multisciences anti-Human TF detect antibody(100X)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Multisciences Human TF Standard (lyophilized)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Multisciences Substrate Reagent	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Multisciences Stop Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	Multisciences anti-Human TF detect antibody(100X)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Multisciences Human TF Standard (lyophilized)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Multisciences Substrate Reagent	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Multisciences Stop Solution	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Potential acute health effects

Eye contact	Multisciences anti-Human TF detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human TF Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Substrate Reagent	No known significant effects or critical hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.
Inhalation	Multisciences anti-Human TF detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human TF Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Substrate Reagent	No known significant effects or critical hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.
Skin contact	Multisciences anti-Human TF detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human TF Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Substrate Reagent	No known significant effects or critical hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.

Ingestion	Multisciences anti-Human TF detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human TF Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Substrate Reagent	No known significant effects or critical hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Inhalation	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Skin contact	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Ingestion	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary, see toxicological information (Section 11)

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Multisciences anti-Human TF detect antibody(100X)	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences Human TF Standard (lyophilized)	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences Substrate Reagent	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences Stop Solution	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	Multisciences anti-Human TF detect antibody(100X)	None known.
	Multisciences Human TF Standard (lyophilized)	None known.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	Multisciences Substrate Reagent	None known.
	Multisciences Stop Solution	None known.
Specific hazards arising from the chemical	Multisciences anti-Human TF detect antibody(100X)	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences Human TF Standard (lyophilized)	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences Substrate Reagent	In a fire or if heated, a pressure increase will occur and the container may burst.

	Multisciences Stop Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Special protective actions for fire-fighters	Multisciences anti-Human TF detect antibody(100X)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Multisciences Human TF Standard (lyophilized)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Multisciences Substrate Reagent	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Multisciences Stop Solution	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Multisciences anti-Human TF detect antibody(100X)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Multisciences Human TF Standard (lyophilized)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Multisciences Substrate Reagent	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Multisciences Stop Solution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Multisciences anti-Human TF detect antibody(100X)	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).

	Multisciences Human TF Standard (lyophilized)	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
	Multisciences Substrate Reagent	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
	Multisciences Stop Solution	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	Multisciences anti-Human TF detect antibody(100X)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Multisciences Human TF Standard (lyophilized)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Multisciences Substrate Reagent	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Multisciences Stop Solution	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage including any incompatibilities	Multisciences anti-Human TF detect antibody(100X)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,
	Multisciences Human TF Standard (lyophilized)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,
	Multisciences Substrate Reagent	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,
	Multisciences Stop Solution	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side- shields.

Skin protection

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state	Multisciences anti-Human TF detect antibody(100X)	Liquid.
	Multisciences Human TF Standard (lyophilized)	Solid
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Liquid.
	Multisciences Substrate Reagent	Liquid.
	Multisciences Stop Solution	Liquid.
Color	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Odor	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Flash point	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.

Auto-ignition temperature	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Flammable limits	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Molecular weight	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Molecular formula	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
pH	Multisciences anti-Human TF detect antibody(100X)	7.0-7.2
	Multisciences Human TF Standard (lyophilized)	Not available
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	7.0-7.2
	Multisciences Substrate Reagent	7.0-7.2
	Multisciences Stop Solution	1.1-1.3
Boiling/condensation point	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Melting/freezing point	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Relative density	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Vapor pressure	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.

Vapor density	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Volatility	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Evaporation rate	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Viscosity	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Solubility	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Physical/chemical properties comments	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.

Section 10. Stability and reactivity

Reactivity	Multisciences anti-Human TF detect antibody(100X)	No specific test data related to reactivity available for this product or its ingredients.
	Multisciences Human TF Standard (lyophilized)	No specific test data related to reactivity available for this product or its ingredients.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific test data related to reactivity available for this product or its ingredients.
	Multisciences Substrate Reagent	No specific test data related to reactivity available for this product or its ingredients.
	Multisciences Stop Solution	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	Multisciences anti-Human TF detect antibody(100X)	The product is stable.
	Multisciences Human TF Standard (lyophilized)	The product is stable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	The product is stable.
	Multisciences Substrate Reagent	The product is stable.
	Multisciences Stop Solution	The product is stable.

Possibility of hazardous reactions	Multisciences anti-Human TF detect antibody(100X)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	Multisciences Human TF Standard (lyophilized)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	Multisciences Substrate Reagent	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
	Multisciences Stop Solution	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Incompatible materials	Multisciences anti-Human TF detect antibody(100X)	No specific data.
	Multisciences Human TF Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Hazardous decomposition products	Multisciences anti-Human TF detect antibody(100X)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Multisciences Human TF Standard (lyophilized)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Multisciences Substrate Reagent	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Multisciences Stop Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity: Not available.

Irritation/Corrosion: Not available.

Sensitization: Not available.

Mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Teratogenicity: Not available.

Specific target organ toxicity (single exposure): Not available.

Specific target organ toxicity (repeated exposure): Not available.

Aspiration hazard: Not available.

Information on the likely routes of exposure: Not available.

Potential acute health effects

Eye contact: Not available.

Inhalation: Not available.
Skin contact: Not available.
Ingestion: Not available.

Symptoms related to the physical, chemical and toxicological characteristics
Eye contact: Not available.
Inhalation: Not available.
Skin contact: Not available.
Ingestion: Not available.

Delayed and immediate effects and also chronic effects from short and long term exposure
Short term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Long term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Potential chronic health effects:
General: Not available.
Carcinogenicity: Not available.
Mutagenicity: Not available.
Teratogenicity: Not available.
Developmental effects: Not available.
Fertility effects: Not available.
Numerical measures of toxicity Acute toxicity estimates: Not available.
Interactive effects: Not available.
Other information: Not available.

Section 12. Ecological information

Toxicity: Not available.
Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil

Soil/water partition: coefficient (K_{OC})	Multisciences anti-Human TF detect antibody(100X)	Not available.
	Multisciences Human TF Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.

Mobility: Not available.
Other adverse effects: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not available.	Not available.	Not available.	Not available.	Not available.	Not available.
UN proper shipping name	Not available.	Not available.	Not available.	Not available.	Not available.	Not available.
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed
SARA 302/304 Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ (lbs)	(gallons)	SARA 304 RQ (lbs)	(gallons)
Multisciences Substrate Reagent with hydrogen peroxide	0-1	Yes.	1000	106.1	1000	106.1

SARA 304 RQ: 68292000 lbs / 31004568 kg
SARA 311/312 Classification: Not applicable.
Composition/information on ingredients: No products were found.

State regulations

Massachusetts: None of the components are listed.
New York: None of the components are listed.
New Jersey: None of the components are listed.
Pennsylvania: None of the components are listed.

Section 15. Regulatory information

International regulations
Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.
Montreal Protocol (Annexes A, B, C, E)
Not listed.
Stockholm Convention on Persistent Organic Pollutants
Not listed.
Rotterdam Convention on Prior Inform Consent (PIC)
Not listed.
UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.
Canada

WHMIS (Canada)

Multisciences anti-Human TF detect antibody(100X)	Not controlled under WHMIS (Canada).
Multisciences Human TF Standard (lyophilized)	Not controlled under WHMIS (Canada).
Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not controlled under WHMIS (Canada).
Multisciences Substrate Reagent	Not controlled under WHMIS (Canada).
Multisciences Stop Solution	Not controlled under WHMIS (Canada).

Canadian lists Canadian NPRI: None of the components are listed.
CEPA Toxic substances: None of the components are listed
Canada inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

History

Date of issue/Date of revision: 9/11/2016

Date of previous issue: No previous validation.

Version: 1

Section 16. Other information

Key to abbreviations:

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.