

SAFETY DATA SHEET

Multisciences Mouse TNF- α High Sensitivity ELISA Kit

Section 1. Identification

GHS product identifier Code: Multisciences Mouse TNF- α High Sensitivity ELISA Kit, EK282HS/3

Other means of identification: Not available

Trade name: Mouse TNF- α High Sensitivity ELISA Kit

Supplier/Manufacturer 3F, Building 2, No.1688 Tianma Road, Times High Tech Park, Xiaoshan District, Hangzhou, Zhejiang Province, China.

In case of emergency: Multisciences: 400-6721-600

Section 2. Hazards identification

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| OSHA/HCS status: | Multisciences Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not classified. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No signal word. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No known significant effects or critical hazards. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not applicable. |
| | Multisciences Recombinant Mouse TNF- α Standard (lyophilized) | Not applicable. |
| | Multisciences PBS Buffer with Tween 20 (Assay, | Not applicable. |

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| | Diluent or Washing buffer) | |
| | Multisciences Substrate Reagent | Not applicable. |
| | Multisciences Stop Solution | Not applicable. |
| Prevention | Multisciences Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not applicable. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not applicable. |
| | Multisciences Recombinant Mouse TNF- α 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 | MultisciencesGoat Anti-Mouse TNF- α Detection Antibody(100X) | Not applicable. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not applicable. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | None known. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | None known. |
| | Multisciences Recombinant Mouse TNF- α 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 Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X)

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X)

No known significant effects or critical hazards.

Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X)

No known significant effects or critical hazards.

Multisciences Recombinant Mouse TNF- α 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.

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| | Multisciences Substrate Reagent | No known significant effects or critical hazards. |
| | Multisciences Stop Solution | No known significant effects or critical hazards. |
| Skin contact | Multisciences Goat Anti-Mouse TNF- α Detection Antibody(100X) | No known significant effects or critical hazards. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No known significant effects or critical hazards. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α 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

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| Multisciences Goat Anti-Mouse TNF- α Detection Antibody(100X) | Use an extinguishing agent suitable for the surrounding fire. |
| Multisciences Recombinant Mouse TNF- α 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. |

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| Unsuitable extinguishing media | Multisciences Goat Anti-Mouse TNF- α Detection Antibody(100X) | None known. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α 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

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| Multisciences Goat Anti-Mouse TNF- α Detection Antibody(100X) | Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). |
| Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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

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| Multisciences Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α Standard(Iyophilized) | 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

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| Multisciences Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α Standard(Iyophilized) | 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 |

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| | Standard (lyophilized) | |
| | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | 7.0-7.2 |
| | Multisciences Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(lyophilized) | Not available. |
| | Multisciences PBS Buffer with Tween 20 | Not available. |

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| | (Assay, Diluent or Washing buffer) | |
| | Multisciences Substrate Reagent | Not available. |
| | Multisciences Stop Solution | Not available. |
| Melting/freezing point | Multisciences Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific test data related to reactivity available for this product or its ingredients. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | The product is stable. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | No specific data. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection 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 Recombinant Mouse TNF- α 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not available. |
| | Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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 Goat Anti-Mouse TNF- α Detection Antibody(100X) | Not controlled under WHMIS (Canada). |
| Multisciences Recombinant Mouse TNF- α Standard(Iyophilized) | 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.)**

| | |
|-------------------------|---|
| Health | 0 |
| Flammability | 0 |
| Physical hazards | 0 |
| | |

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

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