

# Material Safety Data Sheet

Version 1.3 - Revision Date 06/11/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Mouse TNF-alpha ELISA Matched Antibody Pair Kit  
**Catalog Number:** 41-9235-P002  
**Brand:** Tonbo Biosciences  
**Supplier:** Tonbo Biosciences  
 6335 Ferris Square, Suite A  
 San Diego, CA 92121  
 USA  
  
**Telephone:** +1 (855) 848-6626 toll-free  
**Fax:** +1 (858) 888-7301  
**Emergency Phone:** +1 (858) 888-7300  
**Preparation Information:** Tonbo Biosciences Product Safety  
 +1 (855) 848-6626 toll-free

## 2. HAZARDS IDENTIFICATION

**Classification of substance or mixture:** Not a hazardous substance or mixture  
**GHS classification:** Does not meet the classification criteria of the EC Directives 67/548/EEC, 1999/45/EC or 1272/2008  
  
**GHS labeling:** Does not meet the need to be labeled in accordance with EC directives or respective national laws.  
  
**Special hazards:** None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	%	CAS number
Sodium chloride	0.1-1.0	7647-14-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.  
 There are no additional ingredients present which are classified as hazardous to health or the environment.

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## 4. FIRST AID MEASURES

### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen and consult a physician.

### **In case of skin contact**

Wash off immediately with soap and plenty of water, remove any contaminated clothing, and consult a physician.

### **In case of eye contact**

Flush eyes with water for at least 15 minutes and consult a physician.

### **If swallowed**

Rinse mouth with water and consult a physician immediately.

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## 5. FIREFIGHTING MEASURES

**Conditions of flammability:** Not flammable or combustible.

### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

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## 6. ACCIDENTAL RELEASE MEASURES

### **Personal precautions**

Avoid breathing vapors, mist or gas. Use eye protection, gloves, and apron.

### **Environmental precautions**

No special environmental precautions required.

### **Methods and materials for containment and cleaning up**

Use a damp mop or sponge to clean up spill and surrounding area. Keep in suitable, closed containers for disposal. Ventilate area and wash site after material is picked up.

## 7. HANDLING AND STORAGE

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store Captured Antibody, Detection Antibody and Standard at -20°C until use. Store aliquoted Streptavidin-HRP Conjugate.

Special requirement: Light sensitive.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Ensure adequate ventilation. Use appropriate personal protective work clothing.

### Personal protective equipment

#### Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin and body protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Hygiene measures

General industrial hygiene practice.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance:

**Capture Antibody, Detection Antibody, and Standard:** Solid; White powder or thin/invisible film.  
**Streptavidin-HRP Conjugate:** Liquid; amber

### Safety data:

pH:

**Capture Antibody, Detection Antibody, and Standard:** data available  
**Streptavidin-HRP Conjugate:** 6-7

Melting point/freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** no data available

**Conditions to avoid:** Prolonged light exposure may affect product performance or quality.

**Materials to avoid:** Acidic material and metals and strong oxidizers. Sodium azide may react with metallic plumbing and form explosive metal azides.

**Hazardous decomposition products:** Other decomposition products - no data available

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## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Ingredient name	Result	Species	Dose	Exposure
Sodium chloride	LD50 Dermal	Rabbit	10000 mg/kg	-
	LD50 Oral	Rat	3000 mg/kg	-
	LDLo Intra-arterial	Guinea Pig	300 mg/kg	-

To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

### Skin corrosion/irritation

Ingredient name	Result	Species	Score	Exposure	Observation
Sodium chloride	Eyes – Moderate irritant	Rabbit	-	24 hrs 100 mgs	-
	Eyes – Moderate irritant	Rabbit	-	10 mgs	-
	Skin – Mild irritant	Rabbit	-	24 hrs 500 mgs	-

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

### Carcinogenicity

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

### Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

**Aspiration hazard:** no data available

### Potential health effects:

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Ingestion** May be harmful if swallowed.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Carcinogenicity** None

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**Reproductive toxicity**                      None  
**Mutagenicity**                                None  
**Sensitization**                                None

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects:**                                no data available

**Additional Information:**                                RTECS: Not available

## 12. ECOLOGICAL INFORMATION

### Toxicity

Ingredient name	Result	Species	Exposure
Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae – Navicula seminulum	96 hours
	Acute EC50 28.85 mg/dm3 Fresh water	Algae – Pseudokirchneriella subcapitata	72 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans – Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants – Lemna minor	96 hours
	Acute LC50 1661 mg/l Fresh water	Daphnia – Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish – Morone saxatilis – Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans – Hyalella Azteca – Juvenile (Fledging, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants – Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia – Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish – Gambusia holbrooki - Adult	8 weeks

**Persistence and degradability:**                                no data available

**Bioaccumulative potential:**                                no data available

**Mobility in soil:**    no data available

**PBT and vPvB assessment:**                                no data available

**Other adverse effects:**    no data available

## 13. DISPOSAL CONSIDERATIONS

**Disposal method:** Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

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## 14. TRANSPORT INFORMATION

**DOT (US) Hazard class:** Not dangerous goods  
**IMDG Hazard class:** Not dangerous goods  
**IATA Hazard class:** Not dangerous goods

## 15. REGULATORY INFORMATION

**OSHA Hazards:** No known OSHA hazards  
**SARA 302 Components** This product is not regulated under Section 302 of SARA and 40 CFR Part 355.  
**SARA 313 Components (40 CFR Part 372):** This product does not contain any of the substances on the Toxic Chemicals List in 40 CFR Part 372.

### SARA 311/312 Hazards

Ingredient name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Sodium chloride	0.1-1.0	No	No	No	Yes	No

**CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):** This product is not reportable under 40 CFR Part 302.4

**US Inventory/TSCA (Toxic Substances Control Act):** Not listed on inventory

### California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Disclaimer:** Not for Human Use

### Further information

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