SAFETY DATA SHEET

Purified and supernatant antibodies containing Thimerosal for "Research use only" applications

1. Product and company information

Products: purified and supernatant antibodies (proteins) in buffers with thimerosal.

Manufacturer

Exalpha Biologicals, Inc 2 Shaker Road, Unit B101 Shirley, MA 01464 Tel. (978) 425-1370

2. Hazards identification

General warnings and precautions

All reagents should be handled in accordance with good laboratory practices using appropriate precautions. In addition, handle all patient samples and control slides with appropriate precautions as described in "Biosafety in Microbial and Biomedical Laboratories", 2nd ed., 1988. HHS Publication No. (CDC) 88-8395, Centers for Disease Control.

GHS- Classification

| Ozone | Not applicable |
|-------|----------------|

GHS Label elements, including precautionary statements: Not dangerous.

Other information: No information available.

3. Composition/Information on Ingredients

| Chemical Name | CAS-No | Weight % | Classification (Reg. 1272/2008) |
|---------------|---------|----------|--|
| Thimerosal | 54-64-8 | <0.1 | Acute Tox. 2 (H300) Acute Tox. 1 (H310) Acute Tox. 2 (H330) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) |

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First aid measures

Eye contact Immediately flush with plenty of water. After initial flushing,

remove any contact lenses and continue flushing for at least

15 minutes.

Skin contact Wash off immediately with soap and plenty of water while

removing all contaminated clothes and shoes.

Inhalation Move to fresh air.

Ingestion Clean mouth with water. Drink plenty of water.

4. Firefighting measures

Flammable properties Not flammable.

Flash point Not determined.

Suitable extinguishing media

Use extinguishing measures that are

appropriate to local circumstances and the

surrounding environment.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for

firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective

gear.

6. Accidental release measures

Personal precautions Ensure adequate ventilation.

Environmental precautions Try to prevent the material from entering

drains or water courses.

Methods for containment Prevent further leakage or spillage if safe to

do so.

Methods for cleaning up Pick up and transfer to properly labeled

containers.

7. Handling and storage

Advice on safe handling Handle in accordance with good industrial

hygiene and safety practice.

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool

and well-ventilated place.

8. Exposure controls and personal protection

Exposure guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|-----------|----------|------------------------------------|
| Thimerosal | | | IDLH: 10 mg/m ³ Hg |
| 54-64-8 | | | Ceiling: 0.1 mg/m³ Hg |
| | | | TWA: 0.05 mg/m ³ except |
| | | | Organo alkyls Hg vapor |

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering measures: Showers, eyewash stations, ventilation systems

Personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection If exposure limits are exceeded or irritation is

experienced, NIOSH/MSHA approved respiratory

protection should be worn. Positive-pressure supplied air

respirators may be required for high airborne

contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical characteristics

Appearance, odor threshold, pH, flashpoint, decomposition temperature, melting point/range, explosion limits, specific gravity, evaporation rate, VOC content (%), odor, physical state @ - 20C, autoignition temperature, boiling point/range, flammability limits in air, solubility, vapor density no data or information available.

10. Stability and reactivity

Stability Stable under recommended storage

conditions.

Incompatible products None known based on information supplied.

Conditions to avoid None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

Hazardous polymerization Hazardous polymerization does not occur.

11. Toxicological Information

Acute toxicity

Product Information: Product does not present an acute toxicity hazard based on known or supplied information.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------|----------------|-------------|-----------------|
| Thimerosal | 75 mg/kg (Rat) | | |

Chronic toxicity

Target organ effects: none known

12. Ecological information

Ecotoxicity: The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---------------|-------------------|--|----------------------------|---|
| Thimerosal | | LC50 (Static) Ictalurus punctatus (Channel catfish): 7.5 mg/l (24 h) | | |
| | | LC50 (Static) Oncorhynchus mykiss (Rainbow trout): 21.2 mg/l (48 h) | | |

13. Disposal considerations

Waste disposal methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging

Do not re-use empty containers.

14. Transport information

Not classified as dangerous goods under DOT, IATA, or ADR.

15. Regulatory information

U.S. Federal Regulations

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| Acute Health Hazard | No |
|-----------------------------------|----|
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical | CWA - Reportable | CWA - Toxic | CWA - Priority | CWA - Hazardous |
|------------|------------------|-------------|----------------|-----------------|
| Name | Quantities | Pollutants | Pollutants | Substances |
| Thimerosal | | Χ | | |

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No | California Prop. 65 |
|---------------|---------|---------------------|
| Thimerosal | 54-64-8 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical | Massachusetts | New | Pennsylvania | Illinois | Rhode |
|------------|---------------|--------|--------------|----------|--------|
| Name | | Jersey | | | Island |
| Thimerosal | | | Х | Χ | |

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. Other information

Full text of H-Statements referred to under sections 2 and 3 H300 +H310 + H330 - Fatal if swallowed, in contact with skin or if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Revision 1

Revision Date 08 June 2018

Revision Note No information available.

| Disclaimer: | |
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