SAFETY DATA SHEET

Section 1: Identification

Product identifier

Product name(s): Vial, Antibody, Biotinylated, CD8

Product No.: 60459

Product Details:

- Purified monoclonal antibodies of mouse, hamster, goat, donkey or rabbit origin.
- Antibody and Protein conjugates to the following molecules: Biotin

Recommended use and restriction on use

Recommended use: Research Use Only (RUO)

Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: ThermoGenesis Corp.
Address: 2711 Citrus Road
Rancho Cordova, CA 95742
Telephone: 1 916 858 5100 or 1 800 783 8357
Fax: 
Contact: Customer Service
E-mail: customerservice@thermogenesis.com
Emergency telephone number: 1 916 549 6362

Section 2: Hazard(s) Identification

Hazard Classification

Not classified.

Label Elements

Hazard Symbol: No symbol.

Signal Word: No signal word.

Hazard Statement: Not applicable.

Precautionary Statements: Not applicable.
Other hazards which do not result in GHS classification: None.

HMIS Classification

- **Health Hazard:** 2
- **Chronic Health Hazard:** 0
- **Flammability:** 0
- **Physical Hazards:** 0

NFPA Rating

- **Health Hazard:** 2
- **Fire:** 0
- **Reactivity Hazard:** 0

Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

### Section 3: Composition/Information on Ingredients

**Mixtures**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide (NaN₃)</td>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>0.09%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
** Aqueous liquid solution composed of antibody with less than 0.1% sodium azide. No ingredients are hazardous or the concentration of all chemicals are below the regulatory threshold limits according to OSHA criteria.

### Section 4: First-aid Measures

**General information:** Get medical attention if symptoms occur.

**Ingestion:** Call a physician or poison control center immediately. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

**Inhalation:** Provide fresh air, warmth and rest, preferably in comfortable
upright sitting position. If not breathing, give artificial respiration. If breathing is difficult give oxygen and consult a physician.

**Skin Contact:**
Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

**Eye contact:**
Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.

**Most important symptoms/effects, acute and delayed**

**Symptoms:**
No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:**
No data available.

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**Section 5: Fire-fighting Measures**

**General Fire Hazards:**
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water spray to keep fire-exposed containers cool.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:**
Use fire-extinguishing media appropriate for surrounding materials such as water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media:**
Not applicable.

**Specific hazards arising from the chemical:**
Fire or excessive heat may produce hazardous decomposition products.

**Special protective equipment and precautions for firefighters**

**Special firefighting procedures:**
No unusual fire or explosion hazards noted.

**Special protective equipment for fire-fighters:**
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
## Section 6: Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal precautions, protective equipment and emergency procedures:</th>
<th>Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined data. Avoid breathing vapors, mist or gas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods and material for containment and cleaning up:</td>
<td>Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.</td>
</tr>
<tr>
<td>Environmental Precautions:</td>
<td>Avoid release to the environment.</td>
</tr>
</tbody>
</table>

## Section 7: Handling and Storage

| Precautions for safe handling: | When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required. |
| Conditions for safe storage, including any incompatibilities: | Keep container tightly closed in a dry and well-ventilated place. |

**Recommended storage temperature:** 2 - 8 °C

## Section 8: Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Control Parameters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Exposure Limits</td>
<td>Contains no substances with occupational exposure limit values.</td>
</tr>
<tr>
<td>Appropriate Engineering Controls</td>
<td>No special requirements under ordinary conditions of use and with adequate ventilation.</td>
</tr>
</tbody>
</table>

**Individual protection measures, such as personal protective equipment**

**General information:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.
Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

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

**Skin Protection**
- **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.

- **Other:** Wear a lab coat or similar protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**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).

**Hygiene Measures:** Observe good industrial hygiene practices.

### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Physical state:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper/lower limit on flammability or explosive limits</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability limit - upper (%)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: No data available.
Relative density: No data available.

Solubility(ies)
   Solubility in water: No data available.
   Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: Not determined.

Section 10: Stability and Reactivity

Reactivity: Stable under recommended storage conditions.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

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

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

Hazardous Decomposition Products: No data available.

Section 11: Toxicological Information

General information: No data on possible toxicity effects have been found.

Information on likely routes of exposure
Ingestion: No harmful effects expected in amounts likely to be ingested by accident.

Inhalation: Limited inhalation hazard at normal work temperatures.
Skin Contact: Negligible irritation to skin at ambient temperatures.

Eye contact: Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
  LD50: No data available.

Dermal
  LD50: No data available.

Inhalation
  LD50: No data available.

Repeated dose toxicity
  Product: Not applicable.

Skin Corrosion/Irritation
  Product: Based on available data, the classification criteria are not met.

Serious Eye Damage/Eye Irritation
  Product: No data available.

Respiratory or Skin Sensitization
  Product: Not a skin sensitizer.

Carcinogenicity
  Product: Based on available data, the classification criteria are not met.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
  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.
US. National Toxicology Program (NTP) Report on Carcinogens:
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.

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.

Germ Cell Mutagenicity
In-vitro
Product: No data available.

In-vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other Effects:
None known.

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.

Synergistic Effects
No data available.

Section 12: Ecological Information

Ecotoxicity:

Acute hazards to the aquatic environment:
Fish
Product: No negative effects on the aquatic environment are known.
Aquatic Invertebrates
Product: No negative effects on the aquatic environment are known.

Chronic hazards to the aquatic environment:
Fish
Product: No negative effects on the aquatic environment are known.

Aquatic Invertebrates
Product: No negative effects on the aquatic environment are known.

Toxicity to Aquatic Plants
Product: No negative effects on the aquatic environment are known.

Persistence and Degradability
Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: Log Kow: No data available.

Mobility in soil:
No data available.

Known or predicted distribution to environmental compartments
Sodium azide (Na(N3))
No data available.

Other adverse effects:
No data available.

Section 13: Disposal Considerations

General information:
Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of product in accordance with federal, state and local regulations.

Disposal instructions:
Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging: Dispose of as unused product in accordance with federal, state and local regulations.

<table>
<thead>
<tr>
<th>Section 14: Transport Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT UN Number:</td>
</tr>
<tr>
<td>UN Proper Shipping Name:</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
</tr>
<tr>
<td>Class:</td>
</tr>
<tr>
<td>Label(s):</td>
</tr>
<tr>
<td>Packing Group:</td>
</tr>
<tr>
<td>Marine Pollutant:</td>
</tr>
<tr>
<td>Limited quantity</td>
</tr>
<tr>
<td>Excepted quantity</td>
</tr>
<tr>
<td>Special precautions for user:</td>
</tr>
<tr>
<td>IMDG:</td>
</tr>
<tr>
<td>UN Number:</td>
</tr>
<tr>
<td>UN Proper Shipping Name:</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
</tr>
<tr>
<td>Class:</td>
</tr>
<tr>
<td>Subsidiary risk:</td>
</tr>
<tr>
<td>EmS No.:</td>
</tr>
<tr>
<td>Packing Group:</td>
</tr>
<tr>
<td>Environmental Hazards</td>
</tr>
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<td>Marine Pollutant:</td>
</tr>
<tr>
<td>Special precautions for user:</td>
</tr>
<tr>
<td>IATA:</td>
</tr>
<tr>
<td>UN Number:</td>
</tr>
<tr>
<td>Proper Shipping Name:</td>
</tr>
<tr>
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</table>
Section 15: Regulatory Information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
No known OSHA hazards.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Not listed.

SARA 302 Extremely Hazardous Substance
The following components are subject to reporting levels established by SARA Title III, Section 302:

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS-No.</th>
<th>Revision Date</th>
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<tbody>
<tr>
<td>Sodium azide (Na(N3))</td>
<td>2662-22-8</td>
<td>2007-07-01</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical
No SARA Hazards.

SARA 313 (TRI Reporting)
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Reportable Quantity
lowest RQ > 999999 lbs

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present, or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present, or none present in regulated quantities.

US State Regulations

US. California Proposition 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

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</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>N/A</td>
</tr>
</tbody>
</table>
US. Massachusetts RTK - Substance List

<table>
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US. Pennsylvania RTK - Hazardous Substances

<table>
<thead>
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<th>Chemical Identity</th>
<th>CAS-No.</th>
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</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Section 16: Other information, including date of preparation or last revision

Issue Date: 07/5/2019

Revision: A

Revision Information: Not applicable.

Source of information: Various sources.

Further Information: No data available.

Disclaimer:
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