Safety Data Sheet

**IMMUNOCULT™ HUMAN CD3/CD28 T CELL ACTIVATOR**

**EFFECTIVE DATE:** 2015-05-20

1 **Product and Company Identification**

1.1 **Product Name:** ImmunoCult™ Human CD3/CD28 T Cell Activator

1.2 **Catalog Number:** 10911, 10971

1.3 **Product Use:** Cell Separation

1.4 **Manufacturer/Supplier:**
STEMCELL Technologies
Suite 500-1618 Station Street
Vancouver, British Columbia V6A 1B6 Canada

1.5 **In Case of Emergency Call:** 1-800-667-0322

2 **Hazards Identification**

2.1 **Classification of the substance or mixture**
Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

2.2 **Label elements**
Not a hazardous substance or mixture.

2.3 **Other hazards**
No data available

3 **Composition / Information on Ingredients**

3.1 **Substances**

3.2 **Mixtures**
No components need to be disclosed according to the applicable regulations.

4 **First Aid Measures**

4.1 **Description of first aid measures**

4.1.1 **If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

4.1.2 **In case of skin contact**
Wash off with soap and plenty of water.

4.1.3 **In case of eye contact**
Flush eyes with water as a precaution.

4.1.4 **If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 **Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in section 2.2 and/or in section 11.

4.3 **Indication of any immediate medical attention and special treatment needed**
No data available
5 Fire Fighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media
Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

5.1.2 Unsuitable Extinguishing Media
No data available

5.2 Special hazards arising from the substance or mixture

5.2.1 Flammable Properties and Hazards
No data available

5.2.2 Flash Pt
No data available

5.2.3 Autoignition Pt
No data available

5.2.4 Explosive Limits
LEL: No data available
UEL: No data available

5.2.5 Hazardous Combustion Products
No data available

5.3 Fire Fighting Instructions
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing vapors, mist or gas.
For personal protection see section 8.

6.2 Environmental precautions
No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up
Keep in suitable, closed containers for disposal.

7 Handling and Storage

7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.

8 Exposure Controls/Personal Protection

8.1 Exposure limits
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Contains no substances with occupational exposure limit values.

8.2 Engineering controls
Use mechanical exhaust or laboratory fume hood to avoid exposure.

8.3 Personal protective equipment

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

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

8.3.3 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).

8.3.4 General hygiene considerations
General industrial hygiene practice.

8.3.5 Environmental exposure controls
No data available

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour 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>
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<tr>
<td>Boiling point/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>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
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<tr>
<td>Vapour density</td>
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</tr>
<tr>
<td>Relative density</td>
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</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### 10 Stability and Reactivity

10.1 **Reactivity**

No data available

10.2 **Chemical stability**

No data available

10.3 **Possibility of hazardous reactions**

No data available

10.4 **Conditions to avoid**

No data available

10.5 **Incompatible materials**

No data available

10.6 **Hazardous decomposition products**

No data available

### 11 Toxicological Information

11.1 **Acute toxicity**

- **Oral:** No data available
- **Inhalation:** No data available
- **Dermal:** No data available
- **Other:** No data available

11.2 **Skin corrosion/irritation**

No data available

11.3 **Serious eye damage/eye irritation**

No data available

11.4 **Respiratory and/or skin sensitization**

No data available

11.5 **Germ cell mutagenicity**

No data available

11.6 **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.
- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **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.

11.7 **Reproductive toxicity**

No data available

11.8 **Specific target organ toxicity - single exposure**

No data available

11.9 **Specific target organ toxicity - repeated exposure**

No data available

11.10 **Aspiration hazard**

No data available
11.11 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.

11.12 Signs and symptoms of exposure

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

11.13 RTECS # No data available

12 Ecological Information

12.1 Toxicity No data available
12.2 Persistence and degradability No data available
12.3 Bioaccumulative potential No data available
12.4 Mobility in soil No data available
12.5 Other adverse effects No data available

13 Disposal Considerations

13.1 Waste disposal method
Offer surplus and non-recyclable solutions to a licensed disposal company.

13.2 Contaminated packaging
Dispose of as unused product.

14 Transport Information

14.1 UN number No data available
14.2 UN proper shipping name
   DOT Not dangerous goods
   ADR/RID Not dangerous goods
   IMDG Not dangerous goods
   IATA Not dangerous goods
14.3 Transport hazard class(es) No data available
14.4 Packing group No data available
14.5 Environmental hazards No data available
14.6 Special precautions No data available

15 Regulatory Information

15.1 USA
No data available
15.2 EU
This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

15.3 Canada
Not WHMIS controlled
This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

16 Other Information

16.1 Prepared by: Quality Control, STEMCELL Technologies Inc.

16.2 Revision: N/A

16.3 Notice: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.

16.4 Disclaimer: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.