

# Material Safety Data Sheet

CellAdhere™ Type IV Collagen, Human, Lyophilized

Cat. No: 07002

## 1 Product and Company Identification

- 1.1 Product Name:** CellAdhere™ Type IV Collagen, Human, Lyophilized
- 1.2 Catalog Number:** 07002
- 1.3 Synonyms:** Not Available
- 1.4 Product Use:** Cell Culture
- 1.5 Manufacturer/Supplier:** STEMCELL Technologies Inc.  
Suite 400, 570 West 7<sup>th</sup> Avenue  
Vancouver, BC V5Z 1B3  
Canada
- 1.6 In Case of Emergency Call:** 604-877-0713
- 1.7 Date Prepared:** September 17, 2012
- 1.8 Prepared By:** Quality Control

## 2 Composition / Information on Ingredients

- | 2.1 Component  | CAS No.     | %W/W |
|----------------|-------------|------|
| Human collagen | [9007-34-5] | n/a  |

## 3 Hazards Identification

- 3.1 Emergency Overview:** Contains potentially biohazardous material derived from human placenta. As with all human derivatives, universal handling precautions are recommended. This product is a potential irritant to eyes, respiratory system, and skin. This product may also be harmful if ingested. Allergic reaction may develop in certain sensitive individuals. Complete toxicological properties have yet to be determined.
- 3.2 Routes of Exposure:** Absorbed through skin, eye contact and ingestion.
- 3.3 Potential Health Effects:**
- 3.3.1 Eye:** May cause eye irritation.
- 3.3.2 Skin:** May cause skin irritation.
- 3.3.3 Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
- 3.3.4 Ingestion:** May be harmful if swallowed.
- 3.4 Chronic Effects/Carcinogenicity:** Not Available
- 3.5 OSHA Regulatory Status:** Not Available

## 4 First Aid Measures

- 4.1 Eyes:** In case of contact with eyes, check for contact lenses and remove if present. Flush thoroughly with water. Call a physician.
- 4.2 Skin:** In case of contact with skin, remove contaminated clothing. Wash the affected area with soap and copious amounts of water. Should irritation occur, contact a physician. Clean contaminated clothing before reuse.
- 4.3 Ingestion:** If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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- 4.4 Inhalation:** If inhaled, remove person to fresh air. If breathing becomes difficult, call a physician.
- 4.5 Puncture Wounds:** Wash thoroughly with soap and water. Allow to bleed freely. Call a physician.
- 4.6 Note to Physician:** Not Available

## 5 Fire Fighting Measures

- 5.1 Flash Point/Method:** Not Applicable
- 5.2 Explosive Limits:**
- 5.2.1 Upper:** Not Applicable
- 5.2.2 Lower:** Not Applicable
- 5.3 Autoignition Temperature:** Not Applicable
- 5.4 Hazardous Combustion Products:** As with any organic material, this product may produce toxic carbon monoxide and dioxide fumes if heated to decomposition and airborne dust may present an explosion hazard.
- 5.5 Conditions of Flammability:** Not Applicable
- 5.6 Extinguishing Media:** Use whatever is appropriate to the surrounding fire.
- 5.7 Fire Fighting Procedures:** Not Applicable - No toxic waste in run-off.
- 5.8 Explosion Data:**
- 5.8.1 Sensitivity to Mechanical Impact:** Not Applicable
- 5.8.2 Sensitivity to Static Discharge:** Not Applicable

## 6 Accidental Release Measures

- 6.1 Leak and Spill Procedure:** Wear chemical-resistant gloves. Ventilate area. Vacuum or collect spill into appropriate waste container for disposal. Remove from area. Flush spill area with water.

## 7 Handling and Storage

- 7.1 Handling:** Contains potentially biohazardous material derived from human placenta. Donors have been tested and found negative for hepatitis B virus, hepatitis C virus and for human immunodeficiency virus-1 and -2 (HIV-1 and HIV-2). However, this product should be considered potentially infectious and treated in accordance with universal handling precautions. May cause allergic reaction in sensitized individuals.
- 7.2 Storage:** Store at -20°C.

## 8 Exposure Controls/Personal Protection

- 8.1 Engineering Controls:** Use with adequate ventilation.
- 8.2 Personal Protective Equipment:**
- 8.2.1 Respiratory Protection:** Sensitive individuals should wear dust masks/respirators
- 8.2.2 Eye Protection:** Either safety glasses or goggles should be worn
- 8.2.3 Skin Protection:** Lab coat, latex gloves.
- 8.3 General Hygiene Considerations:** Wash hands after use.

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## 8.4 Exposure Limits:

8.4.1 ACGIH TLV-TWA: Not Available

8.4.2 OSHA PEL-TWA: Not Available

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## 9 Physical/Chemical Properties:

9.1 Appearance:	White to tan
9.2 Odor:	Typical enzyme odor
9.3 Physical State:	Powder
9.4 pH:	Not Available
9.5 Boiling Point:	Decomposes
9.6 Melting Point:	Not Applicable
9.7 Freezing Point:	Not Available
9.8 Vapor Pressure:	Not Available
9.9 Vapor Density:	Not Available
9.10 Specific Gravity:	Varies
9.11 Evaporation Rate:	Not Available
9.12 Solubility in Water:	Immiscible in water
9.13 Odor Threshold:	Not Available
9.14 Coefficient of Water/Oil Distribution:	Not Available

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## 10 Stability/Reactivity:

10.1 Chemical Stability:	Stable
10.2 Conditions to Avoid:	Not Applicable
10.3 Incompatibility (Material to Avoid):	Not Applicable
10.4 Hazardous Decomposition/By-Products:	As with any organic material, this product may produce toxic carbon monoxide and dioxide fumes if heated to decomposition and airborne dust may present an explosion hazard.
10.5 Hazardous Polymerization:	Will not occur

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## 11 Toxicological Information

11.1 Effects of Short-Term Exposure:	Not Available
11.2 Effects of Long-Term Exposure:	Not Available
11.3 Irritancy of Product:	Not Available
11.4 Sensitization to Product:	Not Available
11.5 Carcinogenicity:	Not Available
11.6 Reproductive Toxicity:	Not Available
11.7 Teratogenicity and Embryotoxicity:	Not Available

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**11.8 Mutagenicity:** Not Available

**11.9 Name of Toxicologically Synergistic Products:** Not Available

**11.10 LD50 (specify species and route):** Not Available

**11.11 LC50 (specify species):** Not Available

## 12 Ecological Information

**12.1** Not Available

## 13 Disposal Considerations

**13.1 Waste Disposal Method:** Disposal should be in accordance with existing practices at your institution. Observe all Federal, Provincial/State and Local Laws.

## 14 Transport Information

### 14.1 Transport Canada

**14.1.1 PIN No.:** Not Available

### 14.2 U.S. Department of Transportation:

**14.2.1 Proper Shipping Name:** Not Available

**14.2.2 Hazard Class:** This substance is not known to be hazardous for transport.

**14.2.3 ID. Number:** Not Available

**14.2.4 Packing Group:** Not Available

**14.2.5 Label Statement:** Not Available

## 15 Regulatory Information

**15.1 WHMIS Classification:** D3

**15.2 Note:** This MSDS was prepared according to the Canadian Controlled Products Regulation and contains all the information required by those regulations.

## 16 Other Information

**16.1 Preparation Information:** Refer to PIS No. 07002

**16.2 This MSDS has been revised in the following section(s):** 1.1

**16.3 Original Issue Date:** April 26, 2012

**16.4 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 Material Safety Data Sheet (MSDS) is current as of the Date Prepared shown in Section 1.7 of this document and may be subject to ammendment by STEMCELL Technologies Inc.

**16.5 Disclaimer:** THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT USED FOR DIAGNOSTIC OR THERAPEUTIC APPLICATIONS.