



AKRONBIOTECH

Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor (rHu GM-CSF)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Date of Issue: 05/10/2021 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor, (rHu GM-CSF)
Product Code: AK8341-0150

1.2. Recommended use of the chemical and restrictions on use

Identified Uses: For research use or further manufacturing use in ex vivo cell therapy applications.
Restricted Uses: Not intended for direct in vivo use or for direct clinical use as drug, therapeutic, biologic or medical device.

1.3. Name, Address, and Telephone of the Responsible Party

Akron Biotechnology, LLC
6353 W Rogers Circle, Suite 2
Boca Raton, FL 33487
561-750-6120
www.akronbiotech.com
Email: info@akronbiotech.com

1.4. Emergency Telephone Number

Emergency Number : 561-750-6120

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Not a hazardous substance or mixture.

2.2. Label Elements

Not a hazardous substance or mixture.

2.3. Other Hazards

Not a hazardous substance or mixture.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable.

3.2. Mixture

Chemical Name	Common name and synonyms	Product Identifier (CAS-No)
Recombinant Human Granulocyte Macrophage-Colony Stimulating Factor	rHu GM-CSF	Not applicable
Human serum albumin	Human albumin, HSA	70024-90-7

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Citric acid	2-hydroxypropane-1,2,3-tricarboxylic acid; Citric acid, anhydrous	77-92-9
Mannitol	Mannite	69-65-8
Disodium phosphate	Disodium hydrogen phosphate; Anhydrous disodium phosphate; Sodium hydrogen phosphate	7558-79-4
Polyethylene glycol	PEG; Polyethylene oxide	25322-68-3

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

Inhalation:

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Seek medical advice if necessary.

Skin Contact:

Remove contaminated clothing. Rinse affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact:

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion:

Rinse mouth with water. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Not applicable.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Not applicable.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: No data available.

5.2. Special Hazards Arising From the Substance or Mixture

No data available.

5.3. Advice for Firefighters

Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. See Section 8 for more detail.

6.2. Environmental Precautions

Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and Materials for Containment and Cleaning Up

Soak up liquid components with inert absorbent material.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

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SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Use appropriate personal protective equipment (PPE). Avoid contact with skin and eyes.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Keep container tightly closed in a dry, well-ventilated place and at a temperature of 2-8°C.

7.3. Specific End Use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

The product contains no substances with occupational exposure limit values from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

8.2. Exposure Controls

Appropriate Engineering Controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

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 face shield, chemical goggles or safety glasses 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, amount of the hazardous substance at the specific workplace and appropriate risk assessment.

Respiratory Protection:

Respiratory protection is not required. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls:

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Appearance	: White to off-white powder, without foreign particles	Odor threshold	: Not available
		pH	: Not available
Odor	: Not available	Melting point/freezing point	: Not available

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Boiling point/boiling range	: Not available	Relative vapor density at 20°C	: Not available
Flash point	: Not available	Relative density	: Not available
Evaporation rate	: Not available	Solubility	: Not available
Flammability (solid, gas)	: Not available	Partition coefficient: N-	: Not available
Lower flammable limit	: Not available	Octanol/Water	
Upper flammable limit	: Not available	Auto-ignition temperature	: Not available
Vapor pressure	: Not available		

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

No data available.

10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see Section 7).

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:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

There is no data available indicating acute toxicity.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity

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.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Treatment of waste per local authority regulations. Empty containers may retain product residues. Avoid disposal of material into untreated sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional, national and local authority requirements.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

UN number	:	No data available
UN proper shipping name	:	No data available
Transport hazard class	:	No data available
Packing group	:	No data available
Environment Hazards	:	No data available
Special precautions for user	:	No data available
Transport in bulk	:	No data available

SECTION 15: REGULATORY INFORMATION

SARA 302 Components

This product does not contain any chemical components subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This product does not contain any chemical components subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	:	No
Chronic Health Hazard	:	No
Fire Hazard	:	No
Sudden Release of Pressure Hazard	:	No
Reactive Hazard	:	No

State Right-to-Know Components

This product does not contain any chemical components subject to the State Right-to-Know Act.

California Prop. 65 Components

This product does not contain any chemical components subject to Proposition 65.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 05/10/2021

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Akron Biotechnology, LLC shall not be held liable for any damage resulting from handling or from contact with the above product.