



78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Revision Date 10-May-2022 **Revision Number** 2.1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE **COMPANY/UNDERTAKING**

Product identifier

Product Name Human Recombinant GM-CSF (E. coli-expressed) Other means of identification 78015 78015.1 78015.2 78015.3 **Catalog Number** DX22193

None

Document Number

Synonyms

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent

Details of the supplier of the safety data sheet

Manufacturer/Supplier

STEMCELL Technologies Canada Inc. Suite 500 - 1618 Station Street Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

1-800-667-0322 **Emergency Telephone**

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)





78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance No information available

Physical state Solid

Odor No data available

Revision Date 10-May-2022 Revision Number 2.1

Other Information

Not applicable

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and drink afterwards plenty of water.





Revision Date 10-May-2022

Revision Number 2.1

SAFETY DATA SHEET

78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Most important symptoms and effects, both acute and delayed Symptoms No information available. Indication of any immediate medical attention and special treatment needed Note to physicians Treat symptomatically. 5. FIRE-FIGHTING MEASURES Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient. Specific hazards arising from the No information available. chemical Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None. Special protective equipment for Firefighters should wear self-contained breathing apparatus and full firefighting turnout fire-fighters gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.	
Environmental precautions		
Environmental precautions	See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
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.	
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	





78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Revision Date 10-May-2022 Revision Number 2.1

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Store in accordance with information listed on the Product Information Sheet (PIS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure LimitsThe following ingredients are the only ingredients of the product above the cut-off level (or
level that contributes to the hazard classification of the mixture) which have an exposure
limit applicable in the region for which this safety data sheet is intended or other
recommended limit. At this time, the other relevant constituents have no known exposure
limits from the sources listed here.

Appropriate engineering controls

Engineering controls	Showers
	Eyewash stations
	Ventilation systems.

Individual protection measures, such as personal protective equipment		
Eye/face protection	No special protective equipment required.	
Skin and body protection	No special protective equipment required.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.	





Revision Date 10-May-2022

Revision Number 2.1

SAFETY DATA SHEET

78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

9. PHYSICAL AND CHEMICAL PROPERTIES Information on basic physical and chemical properties Solid Physical state Appearance No information available No information available Color Odor No data available **Odor threshold** No data available Remarks • Method Property Values No data available None known pН Melting point / freezing point No data available None known Boiling point / boiling range No data available None known Flash point No data available None known **Evaporation rate** No data available None known Flammability (solid, gas) No data available None known Flammability Limit in Air None known Upper flammability limit: No data available Lower flammability limit: No data available Vapor pressure No data available None known Vapor density No data available None known **Relative density** No data available None known No data available Water solubility None known Solubility in other solvents No data available None known Partition coefficient No data available None known No data available Autoignition temperature None known **Decomposition temperature** No data available None known No data available None known **Kinematic viscosity** Dynamic viscosity No data available None known **Explosive properties** No data available No information available **Oxidizing properties** Other Information No information available Softening point No information available Molecular weight No information available Molecular formula VOC Content (%) No information available Liquid Density No information available **Bulk density** No information available

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical stability

Stable under recommended transport or storage conditions.





78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Revision Date 10-May-2022 **Revision Number** 2.1

Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.	
Eye contact	Specific test data for the substance or mixture is not available.	
Skin contact	Specific test data for the substance or mixture is not available.	
Ingestion	Specific test data for the substance or mixture is not available.	
Symptoms related to the physical, chemical and toxicological characteristics		

Symptoms

No information available.

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist) Product Information

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Product Information	





Revision Date 10-May-2022 Revision Number 2.1

SAFETY DATA SHEET

78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Serious eye damage/eye irritation No information available. Product Information No information available. Respiratory or skin sensitization Product Information Germ cell mutagenicity No information available. Product Information No information available. Carcinogenicity Reproductive toxicity No information available. **Product Information** No information available. STOT - single exposure **Product Information** No information available. STOT - repeated exposure **Product Information** No information available. Aspiration hazard **12. ECOLOGICAL INFORMATION** The environmental impact of this product has not been fully investigated. Ecotoxicity **Product Information**

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Persistence and degradability	No information available.
Bioaccumulation	There is no data for this product.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.





Revision Date 10-May-2022

Revision Number 2.1

SAFETY DATA SHEET

78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

14. TRANSPORT INFORMATION

DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR_	Not regulated
ADN	Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances





78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Revision Date 10-May-2022 Revision Number 2.1

US 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

CWA (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).

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.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations This product does not contain any substances regulated by state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By,

Quality Control. STEMCELL Technologies Canada Inc.





78015 78015.1 78015.2 78015.3 - Human Recombinant GM-CSF (E. coli-expressed)

Revision Date 10-May-2022 Revision Number 2.1

Revision Date

10-May-2022

No information available.

Revision Note Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet