

Recombinant Human Prolactin, Tag Free

Section 1: Identification of the Substance/Mixture and of the Company

Identification of the Substance:

- Product name: Recombinant Human Prolactin, Fc tag
- Other names: Recombinant Human Prl
- Recommended Use: For Research Use Only. Not for diagnostic or therapeutic use.

Company/Undertaking Identification

Future Fields Cellular Agriculture and Research LTD.
11130 105 Avenue NW
Edmonton, AB, Canada
T5H0L5

24 hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, or Exposure

- Emergency response: Call Environmental 360 Solutions
- Canada wide: 1-833-463-3607

24 hour Emergency Response for Fire, Exposure or Accident

- Canada and USA: Call 911
- Outside the USA and Canada: Call the local emergency response number

Section 2: Hazardous Ingredients

Relevant Ingredients (≥1%): None

Mixture ingredients are Non-Hazardous according to GHS Classification Guidelines (less than 1% of mixture).

Section 3: Composition / Information on Ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Chemical name	CAS #	Common name	W/V %

Recombinant protein	N/A	Protein	<0.025
Tris hydrochloride	1185-53-1	Tris-HCl	0.605
Sodium chloride	7647-14-5	NaCl	0.8766

Section 4: First Aid Measures

Description of First Aid Measures

Skin contact	Rinse skin with water. Immediate medical attention is not required. If symptoms occur, seek medical advice.
Eye contact	Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes. If symptoms persist, seek medical attention.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If symptoms occur, seek medical advice.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Remove casualty personnel to fresh air. If symptoms occur, seek medical attention immediately.
Notes to Physician	Treat symptomatically
Most important symptoms and effects, both acute and delayed	Not Applicable
Indication of any immediate medical attention and special treatment needed	None



Section 5: Fire or Explosion Measures

Extinguishing Media

Suitable extinguishing media	Water spray, carbon dioxide (CO ₂), foam, dry chemicals
Unsuitable extinguishing media	No information available
Special hazards arising from the substance or mixture	No information available
Protective equipment and precautions for firefighters	Standard procedure for chemical fires

Section 6: Fire or Explosion Measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protection equipment.

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See Section 8 for more information.

Section 7: Handling and Storage

Precautions for safe handling

Use personal protective equipment as required. No special handling advice is necessary.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.



Specific end use(s)

For Research Use Only. Not for diagnostic or therapeutic use.

Section 8: Exposure Controls

Control Parameters

Exposure limits	Contains no substances with occupational exposure limit values
Engineering measures	Ensure adequate ventilation, especially in confined areas

Exposure Controls

Personal protective equipment (PPE)	<p>Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards</p> <p>Hand protection: Wear suitable gloves Glove material: Compatible chemical-resistant gloves</p> <p>Eye protection: Tight sealing safety goggles</p> <p>Skin and body protection: Wear suitable protective clothing</p>
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls	No special environmental precautions required

Section 9: Physical and Chemical Properties

Appearance	Lyophilized powder
Odor	No data
Odor threshold	No data



Molecular weight	No data
pH	7.4
Melting point / melting range	No data
Boiling point / boiling range	No data
Flash point	No data
Autoignition temperature	No data
Decomposition temperature	No data
Evaporation rate	No data
Flammability (solid, gas)	No data
Upper explosion limit	No data
Lower explosion limit	No data
Vapor pressure	No data
Vapor density	No data
Relative density	No data
Specific gravity	No data
Solubility	No data
Partition coefficient:	No data
n-octanol/water	No data
Viscosity	No data
Explosive properties	No data
Oxidizing properties	No data

Other information: No data

Section 10: Stability and Reactivity

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reaction: No information available

Conditions to avoid: No information available

Incompatible materials: No dangerous reaction known under conditions of normal use

Hazardous decomposition products: No data available

Section 11: Toxicological Information

Information on toxicological effects: There is no evidence available indicating acute toxicity.

Principal Routes of Exposure	Potential Health Effects
Eyes	May cause eye irritation. No data available
Skin	May cause skin irritation. No data available
Inhalation	May be harmful by inhalation. No data available
Ingestion	May be harmful if swallowed. No data available
Carcinogenic	No data available
Germ cell mutagen	No data available
Sensitization	No data available
Target organ effects (single and repeated exposure)	No data available
Reproductive toxicity	No data available
Aspiration hazard	No data available

Section 12: Ecological Information

Ecotoxicity: Contains no substances known to be hazardous to the environment or not degradable in wastewater treatment plants.

Mobility in soil: No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Other adverse effects: No information available

Section 13: Disposal

Waste treatment methods

Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved local disposal techniques. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

Section 14: Transport Information

IATA / ADR / DOT-US / IMDG: Not regulated in the meaning of transport regulations

UN number: None

UN proper shipping name: None

Transport hazard class(es): None

Packing group: None

Environmental hazards: None

Special precautions for user: Not applicable

Section 15: Regulatory Information

Safety Regulatory Information

No information available.

Health Regulatory Information

No information available.

Environmental Regulatory Information

No information available.

Section 16: Other Information

Date of Creation: 18 Nov 2023

Usage: For Research Use Only. Not for diagnostic or therapeutic use.

References

- [CCOHS](#)
- [ILPI](#)
- [Environmental 360 Solutions](#)
- [Thermo Fisher Scientific - Documents and Support](#)

**Copyright © 2023 All rights reserved by Future Fields Cellular Agriculture Ltd.
FUTURE FIELDS® is a trademark of Future Fields Cellular Agriculture Ltd., a company
registered in Canada.**

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

End of Safety Data Sheet