



## Safety Data Sheet for Future Fields' Recombinant Human FGF2

Effective Date: 13 May 2023

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

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#### Identification of the Substance:

- Product name: Recombinant Human FGF2
- Other names: Recombinant Human Fibroblast Growth Factor 2, basic FGF
- 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. 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

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**Relevant Ingredients ( $\geq 1\%$ ):** None

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

### Section 3: Composition / Information on Ingredients

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The product contains no hazardous substances at concentration of 1% or greater. This product is not known to contain carcinogens at a concentration of 0.1% or greater. We recommend handling all chemicals with caution.

Chemical Name	CAS #
Recombinant protein	106096-93-9
<b>Buffer Components</b>	
Sodium chloride	7647-14-5
Phosphoric acid, disodium salt	7558-79-4
Phosphoric acid, potassium salt (1:1)	7778-77-0
Potassium chloride	7447-40-7

## Section 4: First Aid Measures

### Description of first aid measures

<b>Skin contact</b>	Rinse skin with water. Immediate medical attention is not required. If symptoms occur, seek medical advice.
<b>Eye contact</b>	Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes. If symptoms persist, seek medical attention.
<b>Ingestion</b>	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If symptoms occur, seek medical advice.
<b>Inhalation</b>	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.
<b>Notes to physician</b>	Treat symptomatically
<b>Most important symptoms and effects, both acute and delayed</b>	Not Applicable



<b>Indication of any immediate medical attention and special treatment needed</b>	None
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## Section 5: Fire or Explosion Measures

### Extinguishing media

<b>Suitable extinguishing media</b>	Water spray Carbon dioxide (CO <sub>2</sub> ) Foam Dry chemicals
<b>Unsuitable extinguishing media</b>	No information available
<b>Special hazards arising from the substance or mixture</b>	No information available
<b>Protective equipment and precautions for firefighters</b>	Standard procedure for chemical fires

## Section 6: Accidental Release 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

<b>Exposure Limits</b>	Contains no substances with occupational exposure limit values.
<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas

### Exposure Controls

<b>Personal Protective Equipment</b>	<p><b>Respiratory protection:</b> In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.</p> <p><b>Hand protection:</b> Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.</p> <p><b>Eye protection:</b> Tight sealing safety goggles.</p> <p><b>Skin and Body Protection:</b> Wear suitable protective clothing.</p>
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice
<b>Environmental Exposure Controls</b>	No special environmental precautions required.

## Section 9: Physical and Chemical Properties



<b>Appearance</b>	Lyophilized powder
<b>Odor</b>	No data
<b>Odor Threshold</b>	No data
<b>Molecular Weight</b>	No data
<b>pH</b>	8.0
<b>Melting point / melting range</b>	No data
<b>Boiling point / boiling range</b>	No data
<b>Flash point</b>	No data
<b>Autoignition Temperature</b>	No data
<b>Decomposition temperature</b>	No data
<b>Evaporation rate</b>	No data
<b>Flammability (solid, gas)</b>	No data
<b>Upper explosion limit</b>	No data
<b>Lower explosion limit</b>	No data
<b>Vapor Pressure</b>	No data
<b>Vapor density</b>	No data
<b>Relative density</b>	No data
<b>Specific gravity</b>	No data
<b>Solubility</b>	No data
<b>Partition coefficient:</b>	No data
<b>n-octanol/water</b>	No data
<b>Viscosity</b>	No data
<b>Explosive properties</b>	No data



<b>Oxidizing properties</b>	No data
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**Other information:** No data

## Section 10: Stability and Reactivity

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**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

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### 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

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### Safety Regulatory Information

No information available.

### Health Regulatory Information

No information available.

### Environmental Regulatory Information

No information available.

## Section 16: Other Information

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Date of Creation: 18 Nov, 2022

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

### References

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

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**

