
Issuing Date:  2017-11-28  Version:  1

SECTION 1. Identification

Product identifier
Product No  61977
Product name  Human Basic Fibroblast Growth Factor (hFGF basic/FGF2)

Recommended use of the chemical and restrictions on use

Identified uses  This product is intended for research purposes only.

Manufacturer, importer, supplier

Manufacturer address  Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
United States
TEL: +1 978 867 2300
FAX: +1 978 867 2400

Website  www.cellsignal.com
Email address  support@cellsignal.com
Emergency telephone number  In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification
This substance/mixture is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

Signal Word  None

Hazard statement(s)  None.

Precautionary Statement(s)  None.

Supplementary Hazard Information
No information available.

SECTION 3. Composition/information on ingredients
SECTION 4. First-aid measures

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.

Inhalation
Move to fresh air.

Ingestion
Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed
No information available.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

Advice for emergency responders
General advice
For further assistance, contact your local Poison Control Center.

Protection of first-aiders
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Explosion Data

Sensitivity to Mechanical Impact
None.

Sensitivity to Static Discharge
None.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Ensure adequate ventilation.

Other information
No information available.

Environmental precautions
See Section 12 for additional 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
Take up mechanically, placing in appropriate containers for disposal.

SECTION 7. Handling and storage

Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>Technical measures/Storage conditions</th>
<th>Keep containers tightly closed in a dry, cool and well-ventilated place.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging material</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

SECTION 8. Exposure controls/personal protection

Control parameters

Appropriate engineering controls
Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment
Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

| Eye/face protection                          | Safety glasses with side-shields                                    |
| Skin and body protection                    | Wear protective gloves/clothing.                                    |
| Respiratory protection                      | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| Hygiene measures                            | Handle in accordance with good industrial hygiene and safety practice. |

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Lyophilized Powder</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
</tr>
</tbody>
</table>
SECTION 10. Stability and reactivity

Reactivity
No information available.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
- Hazardous reactions: None under normal processing.
- Hazardous polymerization: None under normal processing.

Conditions to Avoid
Heat. Exposure to moisture.

Incompatible Materials

Hazardous Decomposition Products
None known based on information supplied.

SECTION 11. Toxicological information

Information on likely routes of exposure
- Inhalation: There is no data available for this product.
- Eye contact: There is no data available for this product.
- Skin contact: There is no data available for this product.
- Ingestion: There is no data available for this product.

Information on toxicological effects
This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium chloride</td>
<td>3000 mg/kg</td>
<td>10 g/kg</td>
<td>42 g/m³ 1 h</td>
</tr>
<tr>
<td>disodium hydrogenorthophosphate</td>
<td>17000 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>sodium dihydrogenorthophosphate</td>
<td>8290 mg/kg</td>
<td>7940 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>ATEmix (oral)</td>
<td>3831 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms
- No information available.

Sensitization
- No information available.

Mutagenic effects
- No information available.

Carcinogenicity
- No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity
- No information available.

STOT - single exposure
- No information available.

STOT - repeated exposure
- No information available.

Neurological effects
- No information available.

Aspiration Hazard
- No information available.

SECTION 12. Ecological information

Ecotoxicity
23.11% of the mixture consists of components of unknown hazards to the aquatic environment.

Persistence and degradability
- No information available.

Bioaccumulation
- No information available.

Mobility
- No information available.

Other adverse effects
No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods
Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations
Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

SECTION 15. Regulatory information

North American Inventory Listing

Canadian Workplace Hazardous Materials Information System (WHMIS) Classification
This product does not meet the criteria for classification under the Hazardous Products Act.
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

**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.

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product contains the following U.S. State Right to Know chemicals:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>disodium hydrogenorthophosphate</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**U.S. FIFRA Label Information**

This product does not contain any substances regulated as pesticides.

**US Commerce Department - Export Administration Regulations Information**

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

**U.S. Drug Enforcement Administration Information**

This product does not contain any substances regulated under the DEA.

**SECTION 16. Other information**

**Issuing Date:** 2017-11-28

**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.
End of Safety Data Sheet