



## Safety Data Sheet (SDS)

---

### SECTION 1 – Identification

**Product Name:** Animal Free Recombinant Human Bone Morphogenetic Protein 4 (BMP4)

**Synonyms:** BMP-4, Bone Morphogenetic Factor 4

**Catalog Number:** HBMP4

**Recommended Use:** For research use only (RUO). Not intended for diagnostic, therapeutic, or clinical applications.

**Manufacturer Contact:**

Pacific Coast Biologics, INC.

2360 Eastman Ave, Suite 101

Oxnard, CA 93030, USA

Email: support@pacificcoastbio.com

**Emergency Contact:** Local medical services or regional poison control center.

---

### SECTION 2 – Hazard Identification

**Classification (GHS):**

Not classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Signal Word:** None

**Hazard Statements:**

- May cause mild eye, skin, or respiratory irritation.
- Recombinant proteins should be handled as potentially bioactive.

**Precautionary Statements:**

- Avoid inhalation, ingestion, and direct contact with skin or eyes.
  - Wear gloves, lab coat, and safety glasses.
  - Wash thoroughly after handling.
-



### SECTION 3 – Composition/Information on Ingredients

**Product:** Recombinant Human BMP4 (Animal Free)

**CAS Number:** Not assigned

**EC Number:** Not assigned

**Formulation:** Lyophilized recombinant protein, no additives.

**Concentration:** Supplied in microgram quantities per vial.

---

### SECTION 4 – First Aid Measures

**General Advice:** Provide SDS to medical personnel. Seek medical attention if adverse effects occur.

- **Inhalation:** Move to fresh air. Seek medical advice if symptoms persist.
  - **Skin Contact:** Wash skin thoroughly with soap and water. Remove contaminated clothing.
  - **Eye Contact:** Rinse cautiously with water for at least 15 minutes. Seek medical attention if irritation continues.
  - **Ingestion:** Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical advice if feeling unwell.
- 

### SECTION 5 – Firefighting Measures

**Extinguishing Media:** Water spray, dry chemical, CO<sub>2</sub>, or foam.

**Hazards from Combustion:** May produce carbon oxides and nitrogen oxides.

**Protective Equipment:** Firefighters should wear self-contained breathing apparatus (SCBA) and protective clothing.

---

### SECTION 6 – Accidental Release Measures

- Avoid aerosol generation.
- Wear suitable personal protective equipment.
- Absorb spills with inert material (e.g., paper towel).



- Clean area with water and appropriate disinfectant.
  - Dispose of waste according to local regulations.
- 

## **SECTION 7 – Handling and Storage**

### **Handling:**

- Use good laboratory practices.
- Avoid direct contact, ingestion, or inhalation.
- Use only in designated laboratory spaces.

### **Storage:**

- Store lyophilized protein at  $-20\text{ }^{\circ}\text{C}$  or below.
  - Store reconstituted solutions at  $-80\text{ }^{\circ}\text{C}$  in aliquots.
  - Avoid repeated freeze–thaw cycles.
  - Keep containers tightly closed and protected from light.
- 

## **SECTION 8 – Exposure Controls/Personal Protection**

**Exposure Limits:** None established.

**Engineering Controls:** Work in a well-ventilated space, ideally in a biosafety cabinet.

### **Personal Protective Equipment (PPE):**

- Eye/Face: Safety glasses or goggles
  - Skin: Gloves and laboratory coat
  - Respiratory: Not normally required; use NIOSH-approved respirator if aerosol risk exists
- 

## **SECTION 9 – Physical and Chemical Properties**

- **Appearance:** White to off-white lyophilized powder; clear solution upon reconstitution



- **Odor:** Odorless
  - **Solubility:** Soluble in water and biological buffers
  - **pH:** Below pH 3.0 when reconstituted in purified water
  - **Stability:** Stable under recommended storage conditions
- 

#### **SECTION 10 – Stability and Reactivity**

- **Chemical Stability:** Stable if stored as recommended
  - **Conditions to Avoid:** Excessive heat, light, and repeated freeze–thaw cycles
  - **Incompatible Materials:** Strong oxidizers
  - **Decomposition Products:** Carbon oxides and nitrogen oxides under fire conditions
- 

#### **SECTION 11 – Toxicological Information**

- **Acute Toxicity:** No data available
  - **Skin/Eye Irritation:** May cause mild irritation
  - **Sensitization:** No data available
  - **Carcinogenicity/Mutagenicity/Reproductive Effects:** No data available
  - **Other Notes:** Treat as a potentially bioactive substance
- 

#### **SECTION 12 – Ecological Information**

- No ecological data available.
  - Expected to pose minimal environmental risk in small laboratory quantities.
- 

#### **SECTION 13 – Disposal Considerations**

- Dispose of contents and container in accordance with local, state, and federal regulations.



- Decontaminate material with appropriate disinfectant before disposal.

---

## **SECTION 14 – Transport Information**

**UN Number:** Not regulated

**Proper Shipping Name:** Non-hazardous laboratory material

**Hazard Class:** Not regulated

**Packing Group:** Not applicable

**Transport Note:** Product is stable at ambient temperatures

---

## **SECTION 15 – Regulatory Information**

- OSHA HCS: Not classified as hazardous
- TSCA: Not listed
- SARA Title III: Not listed
- California Proposition 65: Not listed

---

## **SECTION 16 – Other Information**

**Prepared by:** Pacific Coast Biologics, INC.

**Date Prepared:** 02/28/2026

**Revision Number:** 1.0

This SDS is provided as guidance for safe handling of this material. It does not constitute a warranty of product properties. Users are responsible for ensuring safe use in their laboratory.