# Material Safety Data Sheet (MSDS)

## Polydeoxyribonucleotide (PDRN) Powder

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Polydeoxyribonucleotide (PDRN) Powder
**Source:** Fish Sperm
**Product Grade:** Cosmetic
**CAS Number:** 34360-72-0
**Recommended Use:** Raw material for cosmetic formulation development, subject to safety and regulatory assessment.
**Origin:** China
**Supplier**: Botanic Planet Canada Inc.
**Address:** 2 Bram Crt Unit # 3-4 Brampton, Ontario, Canada
**Telephone number:** 905-455-4444
**Emergency phone number** (613)-996-6666 CANUTEC 24 HOUR EMERGENCY

### SECTION 2: HAZARDS IDENTIFICATION

**GHS/WHMIS Classification:** Not determined from the available manufacturer documentation.
**Signal Word:** Not established.
**Hazard Pictograms:** Not established.
**Hazard Statements:** Not established.
**Potential Exposure Concerns:**

- Airborne powder may cause mechanical irritation of the eyes and respiratory tract.
- Direct contact may cause irritation in susceptible individuals.
- As a fish-derived material, residual fish proteins and potential allergenicity require evaluation.
- Avoid inhalation, ingestion, and unnecessary skin or eye contact.

**Precautionary Measures:**

- Avoid creating airborne dust.
- Wear appropriate personal protective equipment.
- Wash hands thoroughly after handling.
- Use in adequately ventilated areas.

These precautions do not represent a verified hazardous-substance classification.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | Information |
|---|---|
| **Product** | Polydeoxyribonucleotide (PDRN) |
| **Biological Source** | Fish Sperm |
| **CAS Number** | Not confirmed |
| **Molecular Weight** | 60–100 kDa, per COA specification |
| **Assay (Dry Basis)** | ≥99.0% specification |
| **Reported Assay Result** | 104.50% (requires manufacturer clarification) |
| **Protein Content** | 0.49% |

## SECTION 4: FIRST AID MEASURES

**Eye Contact:** Rinse cautiously with clean water for several minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.

**Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing if necessary. Seek medical attention if symptoms develop.

**Inhalation:** Move the affected person to fresh air. Seek medical attention if respiratory irritation or difficulty breathing occurs.

**Ingestion:** Rinse mouth with water. Do not induce vomiting unless instructed by medical personnel. Obtain medical advice if symptoms occur.

**Potential Allergic Reaction:** Individuals with suspected fish allergies should avoid exposure until the product's allergen profile has been assessed. Seek urgent medical attention for breathing difficulty, swelling, or other signs of a serious allergic reaction.

## SECTION 5: FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray, dry chemical, carbon dioxide, or foam, as appropriate for the surrounding fire.

**Specific Hazards:** Organic material may decompose during combustion, potentially releasing irritating fumes and carbon oxides.

**Dust Combustibility:** Not tested or established from the supplied documentation.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid inhaling dust and prevent contact with skin and eyes.

Protective Equipment: Wear gloves, safety goggles, and suitable respiratory protection where dust exposure is possible.

Cleanup Procedures:

1. Restrict unnecessary access to the spill area.
2. Collect powder carefully using dust-minimizing methods.
3. Transfer collected material into a suitable, labelled waste container.
4. Clean remaining residue using an appropriate method.

Environmental Precautions: Prevent uncontrolled release into drains, waterways, and soil.

## SECTION 7: HANDLING AND STORAGE

**Handling Precautions:**

- Avoid inhalation of airborne powder.
- Avoid unnecessary contact with eyes and skin.
- Use clean, dry handling equipment.
- Keep containers closed when not in use.
- Prevent cross-contamination during weighing and processing.

**Storage Conditions:**

- Store in a cool, dry place.
- Do not freeze.
- Protect from strong light.
- Keep containers tightly sealed.
- Avoid excessive moisture and heat.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Occupational Exposure Limits:** No substance-specific limits provided.

**Engineering Controls:** Use adequate ventilation and appropriate dust-control equipment.

**Eye Protection:** Safety goggles or safety glasses.

**Hand Protection:** Suitable protective gloves.

**Skin Protection:** Protective work clothing or laboratory coat.

**Respiratory Protection:** Appropriate particulate respiratory protection where airborne powder exposure cannot be adequately controlled.

General Hygiene: Wash hands after handling. Avoid eating, drinking, or smoking in work areas.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| **Property** | Description / Result |
|---|---|

| | |
|---|---|
| **Appearance** | White, off-white or light-yellow powder or granules |
| **Physical State** | Solid |
| **Odour** | Not specified |
| **Solubility** | Water-soluble |
| **pH Specification** | 6.0–8.0 |
| **Reported pH** | 7.60% (as written on original COA; clarification required) |
| **Molecular Weight** | 60–100 kDa |
| **Assay (Dry Basis)** | 104.50% reported |
| **Loss on Drying** | 9.12% |
| **Protein** | 0.49% |
| **Melting Point** | Not available |
| **Boiling Point** | Not available |
| **Flash Point** | Not established |
| **Bulk Density** | Not available |
| **Vapour Pressure** | Not available |
| **Flammability** | Not determined |
| **Decomposition Temperature** | Not available |

SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:** The manufacturer specifies a three-year shelf life under recommended storage conditions. Supporting stability studies were not supplied.

**Reactivity:** Not established.

**Conditions to Avoid:** Excessive heat, moisture, strong light, and incompatible processing conditions.

**Incompatible Materials:** Compatibility with strong oxidizing agents, strong acids, and strong alkalis has not been established.

**Hazardous Decomposition Products:** Thermal decomposition may generate carbon oxides and other decomposition products.

**Hazardous Polymerization:** No supporting data available.

## SECTION 11: TOXICOLOGICAL INFORMATION

| **Toxicological Endpoint** | Available Information |
|---|---|
| **Acute Oral Toxicity** | Not available |

| | |
|---|---|
| **Acute Dermal Toxicity** | Not available |
| **Acute Inhalation Toxicity** | Not available |
| **Skin Irritation** | Not determined |
| **Eye Irritation** | Not determined |
| **Skin Sensitization** | Not determined |
| **Respiratory Sensitization** | Not determined |
| **Mutagenicity** | Not available |
| **Carcinogenicity** | Not available |
| **Reproductive Toxicity** | Not available |
| **Repeated Exposure Toxicity** | Not available |

**Additional Information:** Because the material is fish-derived and contains a reported 0.49% protein, the potential for allergenic impurities should be assessed.

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Data not available.
**Persistence and Degradability:** Not determined.
**Bioaccumulation Potential:** Not determined.
**Mobility in Soil:** Not determined.
**Other Environmental Effects:** No supporting data provided.
Avoid uncontrolled environmental discharge.

## SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of unused product, contaminated packaging, and cleanup materials in accordance with applicable federal, provincial, and municipal regulations.
Avoid disposal of bulk quantities into drains or waterways.

## SECTION 14: TRANSPORT INFORMATION

| **Transport Information** | Classification |
|---|---|
| **UN Number** | Not determined |
| **UN Proper Shipping Name** | Not determined |
| **Transport Hazard Class** | Not determined |
| **Packing Group** | Not determined |
| **Canadian TDG** | Pending verification |

| | |
|---|---|
| **IATA** | Pending verification |
| **IMDG** | Pending verification |
| **Marine Pollutant** | Not determined |

## SECTION 15: REGULATORY INFORMATION

**Canadian WHMIS Classification:** Not established.

**Canadian Cosmetic Regulations:** Suitability for cosmetic use must be assessed against applicable Canadian requirements, including ingredient identity, safety, product claims, and labelling.

**Fish-Derived Material:** Biological source, species identification, residual protein content, and allergen-related information should be confirmed with the manufacturer.

**Other Regulatory Status:** Not verified.

## SECTION 16: OTHER INFORMATION

Product: Polydeoxyribonucleotide (PDRN) Powder

Supplier: Botanic Planet Canada Inc.

Preparation Date: October 27, 2026

Revision: Draft 1.0

This product is a 100% pure and natural. It does not contain any artificial ingredients or adulteration of any kind to the best of our knowledge and specifications. The analysis and statements herein constitute the most complete information available to Botanic Planet Canada Inc. Please refer to all relevant technical information specific to the product, prior to use. This information contained in this material safety Data sheet is obtained from current and reliable sources. As an ordinary or otherwise user(s) of this product is outside the control of Botanic Planet Canada Inc., no representation or warranty, expressed or implied is made as to the effect(s) of such use (s) (including damages or injury) or any obtained. Botanic Planet Canada Inc. expressly disclaims responsibility as to the ordinary or otherwise uses. Furthermore, Botanic Planet Canada Inc. makes no claims as to the fitness for any use, and you should consider nothing container herein as a recommendation. The Liability of botanic Planet Canada Inc. is limited to the value of the goods and does not include any consequential loss. In the event of any dispute, the Customer hereby agrees that Jurisdiction is limited to the province of Ontario Canada.

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