1. Product and Company Identification

- **Product Code:** 12010
- **Product Name:** Prostaglandin D2
- **Company Name:** Cayman Chemical Company
- **Emergency Contact:** Cayman Chemical Company (800)364-9897
- **Information:** Cayman Chemical Company (734)971-3335
- **Chemical Family:** Prostaglandins & Thromboxanes
- **CAS Number:** 41598-07-6
- **RTECS #:** UK7930000
- **Synonyms:** 9.alpha.,15S-dihydroxy-11-oxo-prosta-5Z,13E-dien-1-oic acid; PGD2

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Percentage</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prostaglandin D2</td>
<td>41598-07-6</td>
<td>100.0 %</td>
<td>No data.</td>
<td>No data.</td>
<td>No data.</td>
</tr>
</tbody>
</table>

3. Hazards Identification

- **Emergency Overview:** No data available.
- **Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection
- **Potential Health Effects (Acute and Chronic):** Harmful if swallowed.
  - Irritant.
  - Material is irritating to the mucous membranes and upper respiratory tract.
  - May be harmful by inhalation or skin absorption.
  - May cause adverse reproductive effects in males and/or females.
  - May cause eye, skin, or respiratory system irritation.
  - May impair fertility.
  - The toxicological properties of this compound have not been fully evaluated.
  - Toxic.

- **LD 50/LC 50:** Please refer to Section 11
- **Signs and Symptoms Of Exposure:** No data available.

4. First Aid Measures

- **Emergency and First Aid Procedures:** If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
  - If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.
  - In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.
  - In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

5. Fire Fighting Measures

- **Flash Pt:** No data.
- **Explosive Limits:** LEL: No data. UEL: No data.
- **Autoignition Pt:** No data.
Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Flammable Properties and Hazards: Emits toxic fumes under fire conditions.

Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.

Unsuitable Extinguishing Media: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Wear a NIOSH/MSHA approved self-contained breathing apparatus and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

Vacuum or sweep up material and place in disposal container.

Avoid raising dust.

After removal, ventilate contaminated area and flush thoroughly with water.

7. Handling and Storage

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Handling: Avoid breathing (dust, vapor, mist, gas).

Avoid contact with eyes, skin, and clothing.

Avoid prolonged or repeated exposure.

Do not reuse this container.

Pregnant females should avoid exposure to this compound.

Use with adequate ventilation.

Wash thoroughly after handling.

Precautions To Be Taken in Storing: Keep tightly closed.

Store at correct temperature.

8. Exposure Controls/Personal Protection

Protective Equipment Summary - Hazard Label Information: Eye wash station in work area Lab coat Latex disposable gloves Safety glasses Safety shower in work area Vent Hood

Respiratory Equipment (Specify Type): Government approved respirator as conditions warrant.

Eye Protection: Safety glasses

Protective Gloves: Latex disposable gloves

Other Protective Clothing: Lab coat

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Work/Hygienic/Maintenance Practices: Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States: [ ] Gas [ ] Liquid [ X ] Solid

Melting Point: 56.00 C - 57.00 C

Boiling Point: No data.

Autoignition Pt: No data.

Flash Pt: No data. Method:

Explosive Limits: LEL: No data. UEL: No data.

Specific Gravity (Water = 1): No data.

Vapor Pressure (vs. Air or mm Hg): No data.

Vapor Density (vs. Air = 1): No data.

Evaporation Rate (vs Butyl Acetate=1): No data.

Solubility in Water: > 5 mg/ml* at 25.0 C
Prostaglandin D2

MATERIAL SAFETY DATA SHEET

Other Solubility Notes: *PBS pH7.2, also sol in EtOH, DMSO & DMF
Percent Volatile: No data.
Corrosion Rate: No data.
Formula: C20H32O5
Molecular Weight: 352.50
pH: No data.
Appearance and Odor: A crystalline solid

10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]
Conditions To Avoid - Instability: No data available.
Incompatibility - Materials To Avoid: strong oxidizing agents
Hazardous Decomposition Or Byproducts: carbon dioxide
carbon monoxide
Hazardous Polymerization: Will occur [ ] Will not occur [ X ]
Conditions To Avoid - Hazardous Polymerization: No data available.

11. Toxicological Information

Toxicological Information: The toxicological effects of this compound have not been thoroughly studied.
Chronic Toxicological Effects: Investigated as a mutagen and reproductive hazard.
May cause reproductive disorders.
Effects on fertility (female fertility index)
Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.
See actual entry in RTECS for complete information.
Prostaglandin D2 RTECS Number: UK7930000
Carcinogenicity/Other Information: No data available.
Carcinogenicity:
NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

Ecological Information: Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

Waste Disposal Method: Dispose in accordance with local, state and federal regulations.

14. Transport Information

LAND TRANSPORT (US DOT)
DOT Proper Shipping Name: No data available.
Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

US EPA SARA Title III
Hazardous Components (Chemical Name) CAS # Sec.302 (EHS) Sec.304 RQ Sec.313 (TRI) Sec.110
1. Prostaglandin D2 41598-07-6 No No No

US EPA CAA, CWA, TSCA
Hazardous Components (Chemical Name) CAS # EPA CAA EPA CWA NPDES EPA TSCA CA PROP 65
1. Prostaglandin D2 41598-07-6 No No No No

SARA (Superfund Amendments and Reauthorization Act of 1986) Lists:
Sec.302: EPA SARA Title III Section 302 Extremely Hazardous Chemical with TPQ. * indicates 10000 LB TPQ if not volatile.
Sec.304: EPA SARA Title III Section 304: CERCLA Reportable + Sec.302 with Reportable Quantity. ** indicates statutory RQ.
Sec.313: EPA SARA Title III Section 313 Toxic Release Inventory. Note: -Cat indicates a member of a chemical category.
Sec.110: EPA SARA 110 Superfund Site Priority Contaminant List
16. Other Information

For research use only, not for human or veterinary clinical use.

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