

**(+)-Cloprostenol (sodium salt)**

Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

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**1. Product and Company Identification**

**Product Code:** 16766  
**Product Name:** (+)-Cloprostenol (sodium salt)  
**Manufacturer Information**  
**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:** 62561-03-9  
**Synonyms:** (+)-9.alpha.,11.alpha.,15R-trihydroxy-16-(3-chlorophenoxy)-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-oic acid, sodium salt; (+)-16-m-chlorophenoxy tetranor PGF2.alpha. (sodium salt); (+)-16-m-chlorophenoxy tetranor Prostaglandin F2.alpha. (sodium salt);

**2. Composition/Information on Ingredients**

Hazardous Components (Chemical Name)	CAS #	Percentage	OSHA PEL	ACGIH TLV	Other Limits
1. (+)-Cloprostenol (sodium salt)	62561-03-9	100.0 %	No data.	No data.	No data.

**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):** Causes eye, skin, or respiratory system irritation.  
 Females of childbearing potential should avoid this chemical; contact may induce uterine contractions.  
 Harmful if swallowed.  
 Material is irritating to the mucous membranes and upper respiratory tract.  
 May be harmful by inhalation, ingestion, or skin absorption.  
 May impair fertility.  
 Oxytotic.  
 Possible sensitizer.  
 Readily absorbed through skin.  
 Stimulates contraction of intestinal and reproductive smooth muscle.  
 The toxicological properties of this compound have not been fully evaluated.  
 This chemical has the potential to induce premature labor or abortion.  
 Toxic.  
**Signs and Symptoms Of Exposure:** Exposure can cause transient bronchospasm, wheezing, and nausea.  
 Ingestion can cause vomiting, nausea, smooth muscle spasms, gynecological hormonal disorders.  
 In pregnant women overexposure may result in abortion or fetal harm.  
 Other effects include peripheral circulatory disturbances and gangrene.

**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

# MATERIAL SAFETY DATA SHEET

## (+)-Cloprostenol (sodium salt)

Page: 2  
Printed: 11/11/2005  
Revision: 11/11/2005

contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 5. Fire Fighting Measures

<b>Flash Pt:</b>	No data.
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Autoignition Pt:</b>	No data.
<b>Fire Fighting Instructions:</b>	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.
<b>Flammable Properties and Hazards:</b>	Emits toxic fumes under fire conditions.
<b>Extinguishing Media:</b>	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.
<b>Unsuitable Extinguishing Media:</b>	No data available.

### 6. Accidental Release Measures

<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	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.
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### 7. Handling and Storage

<b>Hazard Label Information:</b>	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Handling:</b>	Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.
<b>Precautions To Be Taken in Storing:</b>	Keep tightly closed. Store at correct temperature.

### 8. Exposure Controls/Personal Protection

<b>Protective Equipment Summary - Hazard Label Information:</b>	Eye wash station in work area Lab coat Latex disposable gloves Safety glasses Safety shower in work area Vent Hood
<b>Respiratory Equipment (Specify Type):</b>	Government approved respirator as conditions warrant.
<b>Eye Protection:</b>	Safety glasses
<b>Protective Gloves:</b>	Latex disposable gloves
<b>Other Protective Clothing:</b>	Lab coat
<b>Engineering Controls (Ventilation etc.):</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
<b>Work/Hygienic/Maintenance Practices:</b>	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

<b>Physical States:</b>	<input type="checkbox"/> Gas <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	No data.
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	No data. Method:

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<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Specific Gravity (Water = 1):</b>	No data.	
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.	
<b>Vapor Density (vs. Air = 1):</b>	No data.	
<b>Evaporation Rate (vs Butyl Acetate=1):</b>	No data.	
<b>Solubility in Water:</b>	35 mg/ml* at 25.0 C	
<b>Other Solubility Notes:</b>	*PBS pH 7.2, sol. in EtOH, DMSO, & DMF	
<b>Percent Volatile:</b>	No data.	
<b>Corrosion Rate:</b>	No data.	
<b>Formula:</b>	C22H28ClO6 · Na	
<b>Molecular Weight:</b>	446.90	
<b>pH:</b>	No data.	
<b>Appearance and Odor:</b>	A crystalline solid	

**10. Stability and Reactivity**

<b>Stability:</b>	Unstable [ <input type="checkbox"/> ]    Stable [ <input checked="" type="checkbox"/> ]
<b>Conditions To Avoid - Instability:</b>	protect from moisture
<b>Incompatibility - Materials To Avoid:</b>	oxidizing agents
<b>Hazardous Decomposition Or Byproducts:</b>	carbon dioxide carbon monoxide hydrogen chloride gas
<b>Hazardous Polymerization:</b>	Will occur [ <input type="checkbox"/> ]    Will not occur [ <input checked="" type="checkbox"/> ]
<b>Conditions To Avoid - Hazardous Polymerization:</b>	No data available.

**11. Toxicological Information**

<b>Toxicological Information:</b>	The toxicological effects of this compound have not been thoroughly studied.
<b>Chronic Toxicological Effects:</b>	May cause reproductive disorders.
<b>Carcinogenicity/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No    IARC Monographs? No    OSHA Regulated? No

**12. Ecological Information**

<b>Ecological Information:</b>	Runoff from fire control or dilution water may cause pollution.
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**13. Disposal Considerations**

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state and federal regulations.
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**14. Transport Information**

<b>LAND TRANSPORT (US DOT)</b>	
<b>DOT Proper Shipping Name:</b>	No data available.
<b>Additional Transport Information:</b>	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. (+)-Cloprostenol (sodium salt)	62561-03-9	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. (+)-Cloprostenol (sodium salt)	62561-03-9	No	No	No	No

**16. Other Information**

**Company Policy or Disclaimer**

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

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