

Prostaglandin F2.alpha. (tromethamine salt)

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according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: 16020

Product Name: Prostaglandin F2.alpha. (tromethamine salt)

Synonyms: 9.alpha.,11.alpha.,15S-trihydroxy-prosta-5Z,13E-dien-1-oic acid,

tris(hydroxymethyl)aminomethane salt; Dinoprost; PGF2.alpha.;

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Cayman Chemical Company

1180 E. Ellsworth Rd. Ann Arbor, MI 48108

Web site address: www.caymanchem.com

Information: Cayman Chemical Company +1 (734)971-3335

1.4 Emergency telephone number:

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

CHEMTREC Outside USA and Canada: +1 (703)527-3887

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

Acute Toxicity: Oral, Category 4
Toxic To Reproduction, Category 1B

2.2 Label Elements:

2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:





GHS Signal Word: Danger

GHS Hazard Phrases:

H302: Harmful if swallowed.

H360: May damage fertility or the unborn child.

GHS Precaution Phrases:

P264: Wash {hands} thoroughly after handling.

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

GHS Response Phrases:

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

P308+313: IF exposed or concerned: Get medical attention/advice.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

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SAFETY DATA SHEET

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2.3 Adverse Human Health Harmful if swallowed.

Effects and Symptoms: Material may be 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 cause gastrointestinal disturbances. May damage fertility or the unborn child.

May stimulate contraction of intestinal and reproductive smooth muscle. This chemical has the potential to induce premature labor or abortion.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Section 3. Composition/Information on Ingredients

CAS#/ RTECS#	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
38562-01-5 UK8025000	Prostaglandin F2.alpha. (tromethamine salt)	100.0 %		Acute Tox.(O) 4: H302 Toxic Repro. 1B: H360

Section 4. First Aid Measures

4.1 Description of First Aid No data available.

Measures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.

Get immediate medical attention.

In Case of Skin Contact: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.

Get immediate medical attention.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined

and tested by medical personnel.

In Case of Ingestion: 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.

4.2 Important Symptoms and Exposure can cause: diarrhea, dizziness, fever, flushing, headache, hypotension, nausea,

Effects, Both Acute and shivering, vomiting.

Delayed:

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Media: Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing A solid water stream may be inefficient.

Media:

5.2 Flammable Properties and Emits toxic fumes under fire conditions.

Hazards:

Flash Pt: No data.

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

Autoignition Pt: No data.

5.3 Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or

equivalent), and full protective gear to prevent contact with skin and eyes.

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Section 6. Accidental Release Measures

6.1 Protective Precautions, Avoid raising and breathing dust, and provide adequate ventilation.

Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,

Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental Take steps to avoid release into the environment, if safe to do so.

Precautions:

6.3 Methods and Material For Contain spill and collect, as appropriate.

Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

Section 7. Handling and Storage

7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.

in Handling: Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken Keep container tightly closed.

in Storing: Store in accordance with information listed on the product insert.

Other Precautions: Light sensitive.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS#	Partial Chemical Name	Britain EH40	France VL	Europe
38562-01-5	Prostaglandin F2.alpha. (tromethamine salt)	No data.	No data.	No data.
CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
38562-01-5	Prostaglandin F2.alpha. (tromethamine	No data.	No data.	No data.

8.2 Exposure Controls:

8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

(Ventilation etc.): levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

Respiratory Equipment NIOSH approved respirator, as conditions warrant.

(Specify Type):

Work/Hygienic/Maintenan Do not take internally.

ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety

shower.

Wash thoroughly after handling.

No data available.



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Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

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

A crystalline solid Appearance and Odor:

Melting Point: No data. **Boiling Point:** No data. Flash Pt: No data. **Evaporation Rate:** No data.

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

Vapor Pressure (vs. Air or mm No data.

Hg):

Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. Solubility in Water: No data.

Solubility Notes: ~25 mg/ml in PBS (pH 7.2); ~50 mg/ml in EtOH, DMSO & DMF;

Autoignition Pt: No data.

9.2 Other Information

> Percent Volatile: No data.

Molecular Formula & Weight: C20H33O5 · C4H12NO3 475.6

Section 10. Stability and Reactivity

No data available. 10.1 Reactivity:

10.2 Stability: Unstable [] Stable [X]

10.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.

Polymerization: Will occur [] Will not occur [X]

10.4 **Conditions To Avoid:** No data available.

10.5 Incompatibility - Materials acids

> bases To Avoid:

10.6 Hazardous carbon dioxide **Decomposition Or** carbon monoxide nitrogen oxides **Byproducts:**

Section 11. Toxicological Information

The toxicological effects of this compound have not been thoroughly studied. 11.1 Information on

Prostaglandin F2.alpha. (tromethamine salt) - Toxicity Data: Oral LD50 (rat): 665 mg/kg; **Toxicological Effects:**

> Interperitoneal LD50 (rat): 101 mg/kg; Subcutaneous LD50 (rat): 66 mg/kg; Oral LD50 (mouse): 711 mg/kg; Interperitoneal LD50 (mouse): 101 mg/kg; Subcutaneous LD50 (mouse): 214 mg/kg;

Oral TDLO (rat): 2 mg/kg; Interperitoneal TDLO (rat): 300 ug/kg;

Chronic Toxicological

Effects:

Prostaglandin F2.alpha. (tromethamine salt) - Investigated as a drug and reproductive effector. Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.

See actual entry in RTECS for complete information.

Prostaglandin F2.alpha. (tromethamine salt) RTECS Number: UK8025000

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

CAS#	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
38562-01-5	Prostaglandin F2.alpha. (tromethamine salt)	n.a.	n.a.	n.a.	n.a.

Multi-region format



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Section 12. Ecological Information

12.1 Toxicity: Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and No data available.

Degradability:

12.3 **Bioaccumulative** No data available.

Potential:

12.4 No data available. **Mobility in Soil:** 12.5 Results of PBT and vPvB No data available.

assessment:

Section 13. Disposal Considerations

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

Section 14. Transport Information

14.1 LAND TRANSPORT (US DOT):

DOT Proper Shipping Name:

Not dangerous goods.

DOT Hazard Class: UN/NA Number:

14.1 LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not dangerous goods.

UN Number: Hazard Class:

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.

Additional Transport

Transport in accordance with local, state, and federal regulations.

Information:

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
38562-01-5	Prostaglandin F2.alpha. (tromethamine salt)	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
38562-01-5	Prostaglandin F2.alpha. (tromethamine salt)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

Section 16. Other Information

Revision Date: 01/30/2015 Additional Information About No data available.

This Product:

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> currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for

their particular purposes.