

MATERIAL SAFETY DATA SHEET

Revision: 02/13/2002

SECTION 1. Chemical Product and Company Identification Fluprostenol isopropyl ester

Product Code: 16769, Reference #: PGT Product Name: Fluprostenol isopropyl ester

Chemical Family: Prostaglandins

Synonyms

(+)-9.alpha.,11.alpha.,15R-trihydroxy-16-(3-(trifluoromethyl) phenoxy)-17,18,19,20-tetranor-prosta-5Z,13E-dien-1-oic acid,

isopropyl ester; Travoprost

Manufacturer Name and Address: Telephone Numbers: Dates:

Cayman Chemical Company Cayman Chemical Company (800)364-9897 Date Entered: 01/02/2002

1180 E. Ellsworth Rd.

Ann Arbor, MI. 48108 Cayman Chemical Company (734)971-3335 Printed: 02/26/2002

SECTION 2. Composition/Information on Ingredients Fluprostenol isopropyl ester

Hazardous Components (Specific Chemical Identity/Common Name)	CAS#	Percentage
Fluprostenol isopropyl ester	NA	1.0
Ethyl alcohol	64-17-5	99.0

SECTION 3. Hazards Identification Fluprostenol isopropyl ester

Emergency Overview

Route(s) of Entry: Inhalation? Yes, Skin? Yes, Eyes? Yes, Ingestion? Yes, Other: Injection

Potential Health Effects (Acute and Chronic)

Contact may cause eye irritation.

Females of childbearing potential should avoid this chemical; contact may induce uterine contractions.

Causes skin irritation.

Material is irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

Can cause central nervous system depression.

May have a narcotic effect.

Carcinogeniticy: NTP? No, IARC Monographs? No, OSHA Regulated? No

Carcinogenicity/Other Information

Signs and Symptoms Of Exposure

Irritating to the skin, eyes, nose, throat, and respiratory tract.

SECTION 4. First Aid Measures Fluprostenol isopropyl ester

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.

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 15 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.

Note to Physician

Medical Conditions Generally Aggravated By Exposure

SECTION 5. Fire Fighting Measures Fluprostenol isopropyl ester

Flash Pt: NE or NA Method Used:

Explosive Limits: LEL: UEL:

Autoignition Pt: NE or NA Extinguishing Media

Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

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.

Note: Flammable as diluted in ethanol.

Flammable Properties and Hazards

Vapors can travel to a source of ignition and flash back.

Emits toxic fumes under fire conditions.

Hazardous Combustion Products

SECTION 6. Accidental Release Measures Fluprostenol isopropyl ester

Steps To Be Taken In Case Material Is Released Or Spilled

Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

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

SECTION 7. Handling and Storage Fluprostenol isopropyl ester

Hazard Label Information:

Avoid contact with skin and eyes. Do not get on skin and clothing. Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Handling

Avoid contact with eyes, skin, and clothing.

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

Store at correct temperature.

Other Precautions

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.

SECTION 8. Exposure Controls/Personal Protection Fluprostenol isopropyl ester

Protective Equipment Summary - Hazard Label Information

Eve wash station in work area Lab coat Latex disposable gloves

Safety glasses Safety shower in work area Vent Hood

Respiratory Equipment (Specify Type)

Eve Protection Safety glasses

Protective Gloves

Latex disposable gloves

Other Protective Clothing

Lab coat

Engineering Controls (Ventilation etc.)

Good general ventilation should be sufficient to control airborne levels.

SECTION 9. Physical and Chemical Properties Fluprostenol isopropyl ester

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

Boiling Point:

Melting Point:

NE or NA

Melting Point:

NE or NA

Specific Gravity (Water = 1):

Vapor Pressure (vs. Air or mm Hg):

Vapor Density (vs. Air = 1):

Evaporation Rate (vs Butyl Acetate=1):

NE or NA

Solubility in Water: >16 mg/ml* at 25.0 C

Other Solubility Notes: *PBS pH 7.2, sol. in EtOH, DMF, & DMSO

Percent Volatile: NE or NA
Molecular Formula: C26H35F3O6
Molecular Weight: 500.60

pH:

Appearance and Odor A clear, colorless solution

SECTION 10. Stability and Reactivity Fluprostenol isopropyl ester

Stability: Unstable [] Stable [X] Conditions To Avoid - Instability

Incompatibility - Materials To Avoid

Hazardous Decomposition Or Byproducts

carbon dioxide carbon monoxide

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

Conditions To Avoid - Hazardous Polymerization

SECTION 11. Toxicological Information Fluprostenol isopropyl ester

The toxicological effects of this compound have not been thoroughly studied. Chronic Toxicological Effects

SECTION 12. Ecological Information Fluprostenol isopropyl ester

Data not yet available.

SECTION 13. Disposal Considerations Fluprostenol isopropyl ester

Waste Disposal Method

Dispose in accordance with local, state and federal regulations.

SECTION 14. Transport Information Fluprostenol isopropyl ester

DOT Proper Shipping Name

Additional Transport Information

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

SECTION 15. Regulatory Information Fluprostenol isopropyl ester

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any guarantee with regard to the product's properties.

SECTION 16. Other Information Fluprostenol isopropyl ester

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

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