



Section 1. Product and Company Identification

**Product Name** Dihydroergotamine Mesylate  
**CAS Number** 6190-39-2

**Parchem - fine & specialty chemicals**

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EMERGENCY RESPONSE NUMBER  
CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

**Classification of the substance or mixture**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive toxicity - Category 1A

**GHS Label Elements**

**Pictograms:**



**Signal word:** DANGER

**Hazard and precautionary statements**

**Hazard Statements**

May damage fertility or the unborn child

May cause harm to breast-fed children

**Precautionary Statements**

**Prevention**

Obtain special instructions before use

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

Wear protective gloves/protective clothing/eye protection/face protection

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Avoid contact during pregnancy/while nursing

Wash face, hands and any exposed skin thoroughly after handling

**Response**

IF exposed or concerned: Get medical advice/attention



**Storage**

Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

Section 3. Composition / Information on Ingredients

**Common Name** Dihydroergotamine Mesylate  
**Synonym(s)** Dihydroergotamine mesilate; 9,10-Dihydroergotamine mesylate;  
Dihydroergotamine methanesulfonate  
**Formula**  $C_{33}H_{37}N_5O_5 \cdot CH_4O_3S$   
**CAS Number** 6190-39-2

COMPONENT	CAS NUMBER	CONCENTRATION
Dihydroergotamine Mesylate	6190-39-2	100%

Section 4. First Aid Measures

**First-aid Measures**

**General Advice:** Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126).

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

**Eye Contact:** Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms:** May cause eye irritation. May cause skin irritation. May damage fertility or the unborn child. May cause harm to breast-fed children.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically

**Protection of first-aiders**

**First-Aid Providers:** Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste



## Section 5. Firefighting Measures

### Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Foam.

**Unsuitable Extinguishing Media:** No information available.

### Specific hazards arising from the chemical

**Hazardous Combustion Products:** Carbon oxides; Nitrogen oxides; Sulfur oxides

**Specific hazards:** May be combustible at high temperatures

When heated to decomposition it emits toxic fumes

### Special Protective Actions for Firefighters

**Specific Methods:** Cool closed containers with flooding quantities of water until fire is out.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## Section 6. Accidental Release Measures

### Personal precautions, protective equipment, and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Avoid dust formation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. All equipment used when handling the product must be grounded.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment:** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up:** Use appropriate tools to put the spilled solid in a suitable waste disposal container. Clean contaminated surface thoroughly.

## Section 7. Handling and Storage

### Precautions for safe handling

**Technical Measures/Precautions:** Provide sufficient air exchange and/or exhaust in work rooms. All equipment used when handling the product must be grounded. Avoid dust formation. Remove all sources of ignition. Keep away from incompatible materials.

**Safe Handling Advice:** Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest. Do not smoke. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Technical Measures/Storage Conditions:** Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Store away from incompatible materials.

**Incompatible Materials:** Strong oxidizing agents.

Section 8. Exposure Controls / Personal Protection

**Control parameters**

**National occupational exposure limits**

**United States**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Dihydroergotamine Mesylate (CAS# 6190-39-2)	None	None	None	None

**Canada**

Components	Alberta	British Columbia	Ontario	Quebec
Dihydroergotamine Mesylate (CAS# 6190-39-2)	None	None	None	None

**Australia and Mexico**

Components	Australia	Mexico
Dihydroergotamine Mesylate (CAS# 6190-39-2)	None	None

**Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:** Safety glasses with side-shields

**Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.

**Respiratory protection:** Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink, or smoke. Wash hands before breaks and immediately after handling the product.

Section 9. Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** Crystalline

**Color:** White

**Odor:** Faint

**Taste:** No information available

**Molecular Weight:** 679.78 g/mol

**Formula:** C<sub>33</sub>H<sub>37</sub>N<sub>5</sub>O<sub>5</sub>·CH<sub>4</sub>O<sub>3</sub>S

**Flammability:** No information available

**Flash Point:** No information available

**Auto-ignition Temperature:** No information available

**Lower Explosion Limit:** No information available

**Upper Explosion Limit:** No information available

**pH (0.1% Solution):** 4.4 - 5.4

**Melting Point/Range:** 230 - 235°C/446 - 455°F

**Boiling Point/Range:** No information available

**Bulk Density:** No information available

**Decomposition Temperature:** No information available

**Density:** No information available

**Specific Gravity:** No information available

**Vapor Pressure:** No information available

**Evaporation Rate:** No information available

**Vapor Density:** No information available

**VOC content:** No information available

**Odor Threshold:** No information available

**Partition Coefficient (n-Octanol/Water):** No information available

**Viscosity:** No information available

**Miscibility:** No information available

**Solubility:** Very slightly soluble in cold water and methanol

Section 10. Stability and Reactivity

**Reactivity:** Reactive with strong oxidizing agents

**Chemical Stability**

**Stability:** Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Ignition sources. Incompatible materials. Exposure to light.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Carbon oxides. Sulfur oxides. Nitrogen oxides (NO<sub>x</sub>).



### Other Information

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Corrosivity:** No information available

### Section 11. Toxicological Information

#### Information on likely routes of exposure

**Principal Routes of Exposure:** Eyes. Inhalation.

#### Acute Toxicity

##### Component Information

##### Product Information

**LD50/oral/rat - Acute Tox Oral** = > 2000mg/kg

**LD50/oral/mouse - Acute Tox Oral** = > 2000mg/kg

**LD50/dermal/rabbit - Acute Tox Dermal** = No information available

**LD50/dermal/rat - Acute Tox Dermal** = No information available

**LC50/inhalation/rat - Vapor** = No information available

**LC50/inhalation/rat - Gas** = No information available

**LC50/inhalation/rat - Dust/Mist** = No information available

**LC50/Inhalation/mouse - Vapor** = No information available

**LC50/Inhalation/mouse - Gas** = No information available

**LC50/Inhalation/mouse - Dust/Mist** = No information available

#### Symptoms

**Skin Contact:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

**Inhalation:** May cause irritation of respiratory tract.

**Ingestion:** Ingestion may cause nausea, vomiting, diarrhea.

**Aspiration hazard:** No information available

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic Toxicity:** No information available

**Sensitization:** No information available

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic

**Components:** Dihydroergotamine Mesylate

**IARC:** Not Listed

**ACGIH - Carcinogens:** Not Listed

**NTP:** Not Listed

**OSHA HCS - Carcinogens:** Not Listed

**Australia - Prohibited Carcinogenic Substances:** Not Listed



**Australia - Notifiable Carcinogenic Substances:** Not Listed

**Reproductive Toxicity:** May damage fertility or the unborn child

**Reproductive Effects:** May cause harm to breastfed babies

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

#### Specific Target Organ Toxicity

**STOT - Single exposure:** No information available

**STOT - Repeated exposure:** No information available

**Target Organs:** Reproductive System.

#### Section 12. Ecological Information

##### Ecotoxicity

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available

**Mobility:** No information available

#### Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

#### Section 14. Transport Information

##### DOT

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** None

**ERG No:** No information available

**Marine Pollutant:** No data available

**DOT RQ (lbs):** No information available

##### TDG (Canada)

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** No information available

**Description:** No information available

#### **ADR**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Packing Group:** No information available

**Subsidiary Risk:** No information available

**Classification Code:** No information available

**Description:** No information available

**CEFIC Tremcard No:** No information available

#### **IMO/IMDG**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** No information available

**Description:** No information available

**IMDG Page:** No information available

**Marine Pollutant:** No information available

**MFAG:** No information available

**Maximum Quantity:** No information available

#### **RID**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** No information available

**Classification Code:** No information available

**Description:** No information available

#### **ICAO**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available

**Subsidiary Risk:** No information available

**Packing Group:** No information available

**Description:** No information available

#### **IATA**

**UN-No:** Not Regulated

**Proper Shipping Name:** No information available

**Hazard Class:** No information available





**Subsidiary Risk:** No information available

**Packing Group:** No information available

**Description:** No information available

Section 15. Regulatory Information

**International Inventories**

**Components:** Dihydroergotamine Mesylate

**US TSCA:** Not Listed

**Korea KECL:** Not Present

**Philippines (PICCS):** Not Present

**Japan ENCS:** Not Present

**China:** Not Present

**Australia (AICS):** Present

**EINECS-No.:** Present 228-235-6

**U.S. Regulations**

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:** This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:** This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Components:** Dihydroergotamine Mesylate

**Carcinogen:** Not Listed

**Developmental Toxicity:** Developmental Toxicity

**Male Reproductive Toxicity:** Not Listed

**Female Reproductive Toxicity:** Not Listed

**CERCLA/SARA**

**Components:** Dihydroergotamine Mesylate

**CERCLA - Hazardous Substances and their Reportable Quantities:** None

**Section 302 Extremely Hazardous Substances and TPQs:** None

**Section 302 Extremely Hazardous Substances and RQs:** None

**Section 313 - Chemical Category:** None

**Section 313 - Reporting de minimis:** None

**US TSCA**

**Components:** Dihydroergotamine Mesylate

**TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS):** N/A

**TSCA 8(d) - Health and Safety Reporting:** N/A



**Canada**

**WHMIS Hazard Class:** Non-controlled

**Canada Controlled Products Regulation:** This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

**Inventory**

**Components:** Dihydroergotamine Mesylate

**Canada (DSL):** Present

**Canada (NDSL):** Not Listed

**Components:** Dihydroergotamine Mesylate

**CEPA Schedule I - Toxic Substances:** Not listed

**CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting:** Not listed

**EU Classification**

**R-Phrase(s):** Not determined (not applicable)

**S-Phrase(s):** None

**Components:** Dihydroergotamine Mesylate

**Classification:** No information

**Concentration Limits:** No information

**Safety Phrases:** No information

**The product is classified in accordance with Annex VI to Directive 67/548/EEC**

**Indication of danger:** None.

Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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