



Health	3
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Fentanyl citrate MSDS

Section 1: Chemical Product and Company Identification

Product Name: Fentanyl citrate

Catalog Codes:

CAS#: 990-73-8

RTECS: UE5600000

TSCA: TSCA 8(b) inventory: No products were found.

CI#: Not available.

Synonym: Sublmaze, Leptanal, Fentaz, Duragesic; Actiq; Phentanyl Citrate

Chemical Name: Propionanilide, N-(1-phenethyl-4-piperidyl)-, citrate (1:1)

Chemical Formula: C₂₂H₂₈N₂O₂.C₆H₈O₇

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:
1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Fentanyl citrate	990-73-8	100

Toxicological Data on Ingredients: Fentanyl citrate: ORAL (LD50): Acute: 18 mg/kg [Rat]. 368 mg/kg [Mouse].

Section 3: Hazards Identification

Potential Acute Health Effects:

Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator). Slightly hazardous in case of eye contact (irritant). Severe over-exposure can result in death.

Potential Chronic Health Effects:

Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

Fire Hazards in Presence of Various Substances:

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

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.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Solid powder.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 528.61 g/mole

Color: White.

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 150°C (302°F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, methanol.

Solubility:

Soluble in cold water, methanol. Solubility in water - 1 g/40 ml water

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Sensitive to light. May discolor on exposure to light.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 18 mg/kg [Rat].

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans:

Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant, permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects: Warning: May Be Habit Forming. Skin: It may cause skin irritation. It may be absorbed through intact skin. Symptoms may parallel that of ingestion. Eyes: It may cause mild irritation. It may have a strong narcotic effect (pupil contraction) and the eyes may serve as an absorption route to the body in general. Inhalation: Narcotic. It can cause respiratory tract irritation and sneezing or coughing. It may also have an anesthetic effect. Inhalation of large amounts may produce lung edema, respiratory difficulties, and affect behavior/central nervous system (affects similar to ingestion). Ingestion: Toxic! Narcotic. It may cause gastric disturbances such as stomach pain, upset stomach, nausea, vomiting, and constipation. Ingestion of large amounts may affect behavior/central nervous system/peripheral nervous system (central nervous system depression or excitation - general anesthetic, headache, restlessness, skeletal and thoracic muscle rigidity, euphoria, somnolence, convulsions, lightheadedness, drowsiness, fainting, dizziness; flaccid paralysis), respiration(respiratory depressant), eyes (miosis (pupil contraction), blurred vision)and cardiovascular system (hypotension, hypertension, bradycardia, circulatory depression, cardiac arrest). When ingested with a tranquilizer, the following adverse reactions may occur: increased risk of cardiovascular depression chills and/or shivering, restlessness, hallucinatory episodes, mental depression. Chronic Potential Health Effects: Ingestion: May be habit forming upon prolonged or repeated ingestion. Skin and Inhalation: Prolonged or repeated exposure may cause allergic reactions with skin rashes, itching, coughs, stuffy nose, asthma.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 6.1: Poisonous material.

Identification: : Toxic Solid, Organic, n.o.s.(Fentanyl Citrate) UNNA: 2811 PG: II

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations: No products were found.

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

R28- Very toxic if swallowed. R38- Irritating to skin. S1/2- Keep locked up and out of the reach of children. S28- After contact with skin, wash immediately with plenty of [***] S36/37- Wear suitable protective clothing and gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 10:11 AM

Last Updated: 11/01/2010 12:00 PM

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