



Section 1. Product and Company Identification

Product Name Actinomycin / Dactinomycin
Product ID A0977
Chemical Name (Synonyms) Actinomycin D; Meractinomycin
Supplier LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com
Emergency Phone # 1-800-424-9300

Section 2. Hazards Identification

GHS Classification Acute toxicity, Oral (Category 2), H300

GHS Label elements including precautionary statements

Pictogram



Signal word Danger

Hazard and precautionary statements

Hazard statement

H300 - Fatal if swallowed.

Precautionary statements

P264 - Wash skin thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P321 - Specific treatment (see supplemental first aid instructions on this label).

P330 - Rinse mouth.

P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification

Health hazard: 3
Chronic health hazard: *
Flammability: 0
Physical hazard: 0

NFPA Rating

Health hazard: 3
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects

Inhalation - May cause respiratory tract infection.
Skin - May cause skin irritation.
Eyes - May cause serious eye irritation.

Ingestion - Acute toxicity. Fatal if swallowed.
Reproduction - May cause reproductive harm.

Section 3. Composition/Information on Ingredients

Substances

Formula $C_{62}H_{86}N_{12}O_{16}$
CAS No. 50-76-0

Formula Wt. 1255.50
EC No. 200-063-6

Section 4. First Aid Measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eye Contact Flush eyes with water as a precaution.

Skin Contact Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Inhalation If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5. Firefighting Measures

Flash Point Not available.

Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon oxide.

Firefighting Procedures Wear self-contained breathing apparatus for firefighting and protective clothing if necessary.

Unusual Fire Hazards Carbon oxides and nitrogen oxides (NOx).

Section 6. Accidental Release Measures

Personal Precautions Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleanup Avoid creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions Store in a dry and well-ventilated place in a tightly closed container.
Recommended storage temperature: Ambient

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and nitrogen oxides.

Other Remarks This product is light sensitive.

Section 8. Exposure Controls/Personal Protection

Personal protective equipment EXPOSURE CONTROLS

Contains no substances with occupational exposure limit values. Appropriate engineering controls - Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

PERSONAL PROTECTION

Eye/face protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full and Splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min. material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).

Body protection: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

Physical State	Solid.	Color	Salmon pink crystal powder.
Boiling Point	Not available.	Volatility	Not available.
Melting Point	Melting point/range: 243°C-248°C (Dec.)	Density	Not available.
Solubility	Soluble in ethanol, propylene glycol, water and glycol mixture. Soluble in DMSO (50mg/mL) or methanol (10mg/mL).	pH	Not available.
Flash Point	Not available.	Ignition temperature	Not available.
Lower explosion limit	Not available.	Autoignition temperature	Not available.
Upper explosion limit	Not available.	Vapor pressure	Not available.
Water solubility	Not available.	Odor	Not available.
Partition coefficient: n-octanol/water	Not available.	Odor Threshold	Not available.
Relative vapor density	Not available.	Evaporation rate	Not available.

Section 10. Stability and Reactivity

Stability	Stable under recommended storage conditions.
Materials To Avoid	Strong oxidizing agents, strong bases and strong acids.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide and nitrogen oxides.

Possibility of hazardous reactions Not available.

Conditions to avoid Not available.

Section 11. Toxicological Information

Oral LD50 Rat 7.2 mg/kg
Mouse 13 mg/kg
Gastrointestinal: "Hypermotility, diarrhea"
Blood: other changes

Inhalation LC50 Not available.

Dermal LD50 Not available.

Other information on acute toxicity Not available.

Reproductive Toxicity Not available.
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific organ toxicity single exposure (GHS) Not available.

Specific organ toxicity repeated exposure (GHS) Not available.

Teratogenicity Not available.

Skin corrosion/irritation Not available.

Serious eye damage/irritation Not available.

Respiratory or skin sensitization Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity Laboratory experiments have shown mutagenic effects.
rat, liver, DNA damage
rat, DNA damage

Aspiration Hazard Not available

Synergistic effects Not available.

Additional Information RTECS: AU1575000
anemia, drowsiness, weakness
liver, irregularities, based on human evidence

Signs and symptoms of exposure Not available.

Potential Health Effects Inhalation - May cause respiratory tract infection.
Skin - May cause skin irritation.
Eyes - May cause serious eye irritation.
Ingestion - Acute toxicity. Fatal if swallowed.
Reproduction - May cause reproductive harm.

Carcinogenicity This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Dactinomycin).
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

Toxicity Not available.

Mobility in soil Not available.

PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not

conducted.

Persistence and degradability Not available.

Other adverse effects Not available.

Bioaccumulative potential Not available.

Section 13. Disposal Considerations

Waste Disposal Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 14. Transport Information

DOT (US) UN number: 3462 Class: 6.1 Packing group: II
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Dactinomycin)
Marine pollutant: No Poison inhalation hazard: No

IATA UN number: 3462 Class: 6.1 Packing group: II
Proper shipping name: Toxins, extracted from living sources, solid, n.o.s. (Dactinomycin)

IMDG UN number: 3462 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (Dactinomycin)
Marine pollutant: No

Further Information

Section 15. Regulatory Information

Reach No.

SARA 302 Components No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components Acute health hazard, chronic health hazard.

Massachusetts Right To Know Components Actinomycin / Dactinomycin CAS #: 50-76-0 Revision Date: 1993-04-24

Pennsylvania Right To Know Components Actinomycin / Dactinomycin CAS #: 50-76-0 Revision Date: 1993-04-24

New Jersey Right To Know Components Actinomycin / Dactinomycin CAS #: 50-76-0 Revision Date: 1993-04-24

California Prop 65 Components **WARNING!** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.
Actinomycin / Dactinomycin CAS #: 50-76-0 Revision Date: 2007-09-28

Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.

Updated 6/14/2019

For emergencies in the USA, call
CHEMTREC 800-424-9300