
SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY

1.1 Product identifiers

Product Name : **Actinomycin D**
Product Number : AUR10033
Manufacturer : Aurora Medbiochem
Address : 938 South Andreasen Drive, Suite E
Escondido, CA 92029 USA

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Emergency telephone

Emergency Phone # : +1-760-738-1508
Fax Phone # : +1-760-738-1530

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Product/ Chemical Name	Description	Safety Information
Actinomycin D	Solid	See below

SECTION 3: HAZARDS IDENTIFICATION

Components	CAS Number	EC-No.	Molecular Weight	Chemical Formula
Actinomycin D	50-76-0	200-063-6	1255.5	C ₆₂ H ₈₆ N ₁₂ O ₁₆

Emergency Overview:

OSHA Hazards: Target Organ Effect, Highly toxic by ingestion

Target Organs: Bone marrow, Liver, Kidney

GHS Classification: Acute Toxicity: Oral, Category 2

GHS Label elements, including precautionary statements

Pictogram:



Signal word: Danger

GHS Hazard statement(s): H300: Fatal if swallowed.

GHS Precautionary statement(s): P264: Wash skin thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.

P301 + P310 + P330: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P405: Store locked up.
P501: Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 1

Chronic Health Hazard: *

Flammability: 0

Physical hazards: 0

NFPA Rating

Health Hazard: 3

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed

SECTION 4: FIRST AID MEASURES

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 11)

4.3 Indication of any immediate medical attention and special treatment needed No data available.

SECTION 5: FIREFIGHTING MEASURE

5.1 Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides Sulfur
oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapors possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

Environmental precautions: Do not let product enter drains.

Methods for cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

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

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces, and sources of ignition. precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature : -20 °C

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection:

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: General industrial hygiene practice.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	ACTINOMYCIN D
Appearance:	Solid
pH:	No data available
Water Solubility:	No data available
Other Solubility:	No data available
Boiling Point (°C):	No data available
Melting Point (°C):	251-253 °C
Flash Point (°C):	No data available
Ignition Temperature (°C):	No data available
Density:	No data available

SECTION 10: STABILITY AND REACTIVITY

Property	ACTINOMYCIN D
Chemical stability	Stable under recommended storage conditions
Conditions to avoid:	No data available
Materials to avoid:	strong oxidizing agents, strong bases
Hazardous decomposition products:	Carbon oxides, nitrogen oxides, carbon monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

ACTINOMYCIN D

Information on Toxicological Effects: The toxicological effects of this product have not been thoroughly studied.

Actinomycin D - Toxicity Data: Oral LD50 (rat): 7.2 mg/kg; Oral LD50 (mouse): 13 mg/kg; Intraperitoneal LD50 (rat): 0.1 mg/kg; Intraperitoneal LD50 (mouse): 0.5 mg/kg; Subcutaneous LD50 (rat): 0.8 mg/kg; Subcutaneous LD50 (mouse): 0.5 mg/kg;

Chronic Toxicological Effects: Actinomycin D - Investigated as a drug, mutagen, natural product, primary irritant, reproductive effector, and tumorigenic.

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data 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.

Genotoxicity in vitro - rat - Liver DNA damage

Genotoxicity in vivo - rat - Intraperitoneal DNA damage

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 (Actinomycin D)

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.

Reproductive toxicity: no data available; Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity - single exposure (GHS): no data available

Specific target organ toxicity - repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be fatal if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation. May be fatal if absorbed through skin.

Eyes: May cause eye irritation.

Signs and Symptoms of Exposure: anemia, Drowsiness, Weakness

Additional Information: RTECS: KQ6300000

SECTION 12: ECOLOGICAL INFORMATION

ACTINOMYCIN D:

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

SECTION 13: DISPOSAL CONSIDERATION

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

Actinomycin D

OSHA Hazards: Target Organ Effect, Highly toxic by ingestion

DSL Status: This product contains the following components that are not on the Canadian DSL nor NDSL lists. Dactinomycin CAS-No. 50-76-0

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

SAFETY DATA SHEET
Cat# AUR10033, Actinomycin D



Date: 9/01/2022


SARA 313 Components: SARA 313: 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 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: Dactinomycin CAS-No. 50-76-0 Revision Date 1993-04-24

Pennsylvania Right To Know Components: Dactinomycin CAS-No. 50-76-0 Revision Date 1993-04-24

New Jersey Right To Know Components: Dactinomycin CAS-No. 50-76-0 Revision Date 1993-04-24

California Prop. 65 Components:  **WARNING!** This product can expose you to chemicals including Actinomycin D, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

EU regulations

Component	Risk Phrases	Safety Phrases
Actinomycin D	R28	S28, S36/37, S45

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 regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aurora Medbiochem Co. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.