

Creation Date 03-Nov-2009 Revision Date 01-May-2012 Revision Number 2

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description: Actinomycin D

Cat No. 294940000; 294940010; 294940050; 294940250; 294941000

Synonyms Dactinomycin.

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

Recommended Use Laboratory chemicals
Uses advised against No Information available

Details of the supplier of the safety data sheet

Company

Acros Organics BVBA Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

Emergency Telephone Number

For information in the US, call: 001-800-ACROS-01 For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300 CHEMTREC Phone Number, Europe: 001-703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Acute oral toxicity Category 1

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

Symbol(s) T+ - Very toxic

R-phrase(s) R28 - Very toxic if swallowed

Label Elements



Actinomycin D Revision Date 01-May-2012

SECTION 2. HAZARDS IDENTIFICATION



Signal Word Hazard Statements H300 - Fatal if swallowed **Danger**

Precautionary Statements - EU (§28, 1272/2008)

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

Other Hazards

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | EC-No. | Weight % | CAS-No | 67/548/EEC Classification | CLP Classification - Regulation (EC) No 1272/2008 | REACH No. |
|--------------------------|-------------------|----------|---------|------------------------------|--|-----------|
| Actinomycin D 50-76-0 | EEC No. 200-063-6 | >90 | 50-76-0 | T+; R28 | Acute Tox. 2 (H300) | - |

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention

is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation

if victim ingested or inhaled the substance; induce artificial respiration with a respiratory

medical device. Immediate medical attention is required.



Actinomycin D Revision Date 01-May-2012

Notes to Physician Treat symptomatically

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

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

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for fire-fighters

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

Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

Environmental precautions

Should not be released into the environment.

Methods and material for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Do not breathe dust.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Keep refrigerated. Keep locked-up.

Specific End Uses



Actinomycin D Revision Date 01-May-2012

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Biological limit values This product, as supplied, does not contain any hazardous materials with biological limits

established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)
Predicted No Effect Concentration

(PNEC)

No information available. No information available.

Exposure controls

Engineering Measures Use only under a chemical fume hood Ensure adequate ventilation, especially in confined

areas Ensure that eyewash stations and safety showers are close to the workstation location

Personal protective equipment

Eye Protection Safe

Hand Protection
Skin and body protection

Safety glasses with side-shields

Protective gloves
Long sleeved clothing

Respiratory Protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Powder, Solid

Appearance Red
odor odorless
pH No information available.

pH No information available.

Boiling Point/Range No information available.

Melting Point/Range 245 - 252°C / 473 - 485.6°F

Flash Point No information available.

Autoignition Temperature No information available.

Autoignition Temperature No information availa Molecular Formula C62H86N12O16

Molecular Weight 1255.5

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Hygroscopic. Light sensitive.



Actinomycin D Revision Date 01-May-2012

Possibility of Hazardous Reactions

Hazardous Polymerization Hazardous Reactions.

No information available No information available.

Conditions to Avoid

Avoid dust formation, Excess heat, Exposure to light, Exposure to moisture.

Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NOx).

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation | | |
|---------------|-----------------|-------------|-----------------|--|--|
| Actinomycin D | 7.2 mg/kg (Rat) | | | | |

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization Repeated contact may cause allergic reactions in very susceptible persons

Mutagenic Effects Mutagenic effects have occurred in humans.

Developmental EffectsSubstances known to cause developmental toxicity in humans **Teratogenicity**Teratogenic effects have occurred in experimental animals.

Target Organs Kidney Liver Skin Central nervous system (CNS) Blood Bone Marrow

Other Adverse Effects Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS

for complete information

Endocrine Disruptor Information None known

SECTION 12. ECOLOGICAL INFORMATION

Toxicity



Actinomycin D Revision Date 01-May-2012

Ecotoxicity effects Do not empty into drains

Persistence and degradability

No information available

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Results of PBT and vPvB assessment

Other adverse effects

No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues / Unused

Products

Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken to local recyclers for disposal

SECTION 14. TRANSPORT INFORMATION

IMDG/IMO

UN-No UN2811 Hazard Class 6.1 Packing Group II

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

ADR

UN-No UN2811 Hazard Class 6.1 Packing Group II

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

IATA

UN-No UN2811 Hazard Class 6.1 Packing Group II



Actinomycin D Revision Date 01-May-2012

SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name TOXIC SOLID, ORGANIC, N.O.S.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

| Component | EINECS | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | CHINA | AICS | KECL |
|---------------|---------------|---------------|-----|------|-----|------|-------|------|-------|------|------|
| Actinomycin D | 200-063-6 | - | | - | - | - | - | - | - | - | - |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

AICS - Inventory of Chemical Substances

KECL - Existing and Evaluated Chemical Substances

Chemical Safety Assessment

SECTION 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R28 - Very toxic if swallowed

Revision Date 01-May-2012

Revision Summary

Not applicable Reason for revision

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.



Actinomycin D Revision Date 01-May-2012

End of Safety Data Sheet

ACR29494