

TREVIGEN[®]

MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL IDENTIFICATION

PRODUCT NAME: **Valinomycin**

CATALOG NUMBER: **6305-100-02**

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS#: 2001-95-8

NAMES: component A: Valinomycin synonyms: valinomicin, antibiotic N-329, NSC 122023,

Component B : DMSO (solvent) (See specific MSDS sheet)

SECTION 3: HAZARDS IDENTIFICATION

Label Precautionary Statements

Highly toxic (USA)

Very toxic (EU)

Very toxic by inhalation, in contact with skin and if swallowed.

Target organ(s):

Nerves

Heart

In case of accident or if you feel unwell, seek medical advice immediately.

(Show the label where possible) wear suitable protective clothing, gloves and eye/face protection. Do not breathe dust.

SECTION 4: FIRST-AID MEASURES

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminating clothing and shoes.

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

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Wash contaminated clothing before reuse.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Water spray.

Carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards

Emits toxic fumes under fire conditions

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

SECTION 7: HANDLING AND STORAGE

Refer to section 8.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical safety goggles.
Compatible chemical-resistant gloves.
NIOSH/MSHA-Approved respirator.
Safety shower and eye bath.
Mechanical exhaust required.
Do not breath vapor.
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
Wash contaminated clothing before reuse
Keep tightly closed.
Refrigerate

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor.
(red-orange liquid when in DMSO)

SECTION 10: STABILITY AND REACTIVITY

Incompatibilities
Strong oxidizing reagents

Hazardous combustion or decomposition products.
Carbon monoxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Accute effects:
May be fatal if inhaled, swallowed or absorbed through skin
May cause irritation.
May cause convulsion.
To the best of our knowledge, the chemical, physical and toxicological properties have not yet been thoroughly investigated.

Chronic effects:
Target organs
Heart
Peripheral nervous system
Central nervous system
RTECS #: YV9468000

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TOXICITY DATA

ORL-RAT LD50:4 MG/KG 8,451,1985	DCTODJ
IPR-RAT LD50:800 UG/KG 8,451,1985	DCTODJ
ORL-MUS LD50:2500 UG/KG 1,325,1978	85ERAY
IPR-MUS LD50:390 UG/KG JAN1986	NCISP*
SCU-MUS LD50:4140 UG/KG 12,482,1962	ANTCAO
IVN-MUS LD50:180 UG/KG 46,5518,1986	CNREA8
SKN-RBT LD50:5 MG/KG 8,451,1985	DCTODJ

TARGET ORGAN DATA
BEHAVIORAL (TREMOR)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
NUTRITIONAL AND GROSS METABOLIC (WEIGHT LOSS OR
DECREASED WEIGHT GAIN)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL
SUBSTANCES

SECTION 12: ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13: DISPOSAL CONSIDERATIONS

Mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

No hazard class, identification number, packing group or shipping name assigned to this chemical

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SECTION 15: REGULATORY INFORMATION

European information

Very toxic

R 26/27/28

Very toxic by inhalation, in contact with skin and if swallowed

S 45

In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible).

S 36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

S 22

Do not breath dust

REVIEWS, STANDARDS, AND REGULATIONS

Oel=mak

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

U.S. INFORMATION

This product is subject to SARA Section 313 reprotin requirements.

SECTION 16: OTHER INFORMATION

The above information is believed to be correct, however, the physical, chemical, and toxicological properties of the product may not yet have been fully characterized. Trevigen recommends the use of gloves, lab coats and eye protection while using or handling this product. Trevigen assumes no liability for damage resulting from handling or contact with the above product.

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MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL IDENTIFICATION

PRODUCT NAME: **DMSO**CATALOG NUMBER: component B of **6305-100-01**

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS#: 67-68-5

Methane sulfinylbis- , DMSO, dimethylsulfoxide

SECTION 3: HAZARDS IDENTIFICATION

Label Precautionary Statements

Harmful.

Harmful by inhalation, in contact with skin or if swallowed.

Irritating to eyes, respiratory system and skin.

Readily absorbed through skin.

Target organs:

eyes

skin

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable clothing.

SECTION 4: FIRST-AID MEASURES

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminating clothing and shoes.

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

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Wash contaminated clothing before reuse.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Water spray.

Carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards

Forms explosive mixtures in air.

Emits toxic fumes under fire conditions.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete

SECTION 7: HANDLING AND STORAGE

Refer to section 8.
additional information

DMSO undergoes a violent exothermic reaction on mixing with copper wool and trichloroacetic acid. On mixing with potassium permanganate, it will flash instantaneously. It reacts violently with: acid halides, cyanuric chloride, silicon tetrachloride, phosphorus trichloride and trioxide, thionyl chloride, magnesium perchlorate, silver fluoride, methyl bromide, perchloric and periodic acids. When heated above its boiling point methyl sulfoxide degrades giving off formaldehyde, methyl mercaptan, and sulfur dioxide.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical safety goggles.
Compatible chemical-resistant gloves.
NIOSH/MSHA-Approved respirator.
Safety shower and eye bath.
Mechanical exhaust required.
Do not breath vapor.
Avoid contact with eyes, skin and clothing.
Wash thoroughly after handling.
Keep tightly closed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and odor.
(orange liquid when dissolving MitoShift)

SECTION 10: STABILITY AND REACTIVITY

Incompatibilities
Strong oxidizing agents

Hazardous combustion or decomposition products.
Nature of decomposition products not known.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute effects
May be harmful by inhalation, ingestion, or skin absorption.
Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract.
Causes skin irritation.
Readily absorbed through skin.
May cause allergic respiratory and skin reactions
Chronic effects target organ(s):
Eyes
Skin

RTECS no: PV6210000

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Irritation data: 10 mg/24 H open skin rabbit mild; 500 mg/24 H skin rabbit, mild; 100 mg/ eye rabbit; 500 mg/24H eyes rabbit mild;
LD₅₀/ LC₅₀: 7.92g/kg oral mouse; 14.5 g/kg, oral rat; 50g/kg skin mouse; 40 g/kg skin rat;

SECTION 12: ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13: DISPOSAL CONSIDERATIONS

Mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14: TRANSPORT INFORMATION

Contact Trevigen for transportation information.

SECTION 15: REGULATORY INFORMATION

TSCA

CAS# 67-68-5 is listed on the TSCA inventory

None of the chemicals are on the health and safety reporting list, the chemical test rule, under TSCA section 12 b, nor have a SNUR under TSCA.

SARA codes

None of the chemicals have a RQ, a TPQ, nor are reportable under section 313

Cas # 67-88-5: acute, flammable

Clean Air act:

this material does not contain any hazardous air pollutant, any class 1 nor class 2 Ozone depleters.

Clean air act:

this chemicals is not listed as hazardous, nor priority pollutants, nor toxic pollutant, under CWA

INTERNATIONAL

European Information

European labeling in accordance with EC directives

hazard symbols: Xi

Risk Phrases: Safety Phrases

S 24/25 Avoid contact with skin and eyes

Canada

CAS#67-68-5 is listed on Canada's DSL/NDSL list

CAS#67-68-5 is listed on Canada's disclosure list

Exposure limits :CAS#67-68-5: OEL-Russia:Stel 20 mg/m³. Oel Switzerland:TWA 50 ppm(160 mg/m³);skin

SECTION 16: OTHER INFORMATION

The above information is believed to be correct, however, the physical, chemical, and toxicological properties of the product may not yet have been fully characterized. Trevigen recommends the use of gloves, lab coats and eye protection while using or handling this product. Trevigen assumes no liability for damage resulting from handling or contact with the above product.