

# SAFETY DATA SHEET

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## SECTION 1: PRODUCT AND COMPANY INFORMATION

**Product name:** Component D3

**Contact:**

Elixirgen Scientific, Inc.  
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## SECTION 2: HAZARD IDENTIFICATION

**GHS classification of the substance/mixture:**

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 4), H227

Acute toxicity, Oral (Category 2), H300

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335

**GHS label elements, including precautionary statements:**

Pictogram



Signal word

Danger

Warning

Hazard statement(s)

H227

Combustible liquid.

H300

Fatal if swallowed.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P264

Wash skin thoroughly after handling.

P270

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

P271	Use only outdoors in a well-ventilated area.
P280	Wear protective gloves/eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

**Other hazards which do not result in the classification or are not covered by the GHS:**

None.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS SUBSTANCE**

**Hazardous components**

<b>component</b>	<b>Classification</b>	<b>Concentration</b>
Dimethyl sulfoxide	Flam. Liq. 4; H227	<= 100 %
6-[[2-[[4-(2,4-dichlorophenyl)-5-(5-methyl-1H-imidazol-2-yl)-2-pyrimidinyl]amino]ethyl]amino]-3-pyridinecarbonitrile	Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H300, H315, H319, H335	< 0.001 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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**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.

**If inhaled**

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

**In case of skin contact**

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

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

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

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

**Indication of any immediate medical attention and special treatment needed**

No data available.

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**SECTION 5: FIRE-FIGHTING MEASURES****Suitable extinguishing media:**

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

**Specific hazards arising from the substance or mixture:**

Carbon oxides, sulphur oxides, nitrogen oxides, and hydrogen chloride gas.

**Special protective equipment and precautions for firefighters:**

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

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**SECTION 6: ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures:**

Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

**Environmental precautions:**

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

**Methods and materials for containment and cleaning up:**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**Reference to other sections**

For disposal see section 13.

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**SECTION 7: HANDLING AND STORAGE**

**Precautions for safe handling:**

Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

**Conditions for safe storage, including any incompatibilities:**

Store at -20 °C. Protected from light.

**Specific end uses:**

Use in a laboratory fume hood where possible. Refer to employer's COSHH risk assessment.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters:**

**Components with workplace control parameters**

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Dimethyl sulfoxide	67-68-5	TWA	250.000000 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

**Exposure controls**

**Appropriate engineering controls**

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

**Personal protective equipment:**

Respiratory: In case of insufficient ventilation wear suitable respiratory equipment.

Eyes:	Safety goggles or splash guard safety glasses.
Body:	Lab coat and gloves.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form: liquid, clear Color: colorless
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	Melting point/range: 16 - 19 °C (61 - 66 °F)
Initial boiling point and boiling range:	189 °C (372 °F)
Flash point:	87 °C (189 °F) - closed cup
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower flammability or explosive limits:	Upper explosion limit: 42 %(V) Lower explosion limit: 3.5 %(V)
Vapor pressure:	0.55 hPa (0.41 mmHg) at 20 °C (68 °F)
Vapor density:	2.70 - (Air = 1.0)
Relative density:	1.1 g/mL
Water Solubility(ies):	completely miscible
Partition coefficient: n-octanol/water:	log Pow: -2.03
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

### Other safety information

Relative vapour density 2.70 - (Air = 1.0)

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## SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
Conditions to avoid:	Heat, moisture, flames, and sparks.
Incompatible materials:	Acid chlorides, Phosphorus halides, Strong acids/alkalis, Strong oxidizing/reducing agents
Hazardous decomposition products:	In combustion may emit toxic fumes. No known decomposition information.

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## SECTION 11: TOXICOLOGICAL INFORMATION

### Acute toxicity:

LD50 Oral - Rat - 14,500 mg/kg

LC50 Inhalation - Rat - 4 h - 40250 ppm

LD50 Dermal - Rabbit - > 5,000 mg/kg

### Skin corrosion/irritation:

No data available.

### Serious eye damage/eye irritation:

No data available.

### Respiratory or skin sensitization:

No data available.

### Germ cell mutagenicity

Mouse

lymphocyte

Cytogenetic analysis

Mouse

lymphocyte

Mutation in mammalian somatic cells.

**Rat**

Cytogenetic analysis

Mouse

DNA damage

### Carcinogenicity

Carcinogenicity - Rat - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors.

Carcinogenicity - Mouse - Oral

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Leukaemia Skin and Appendages: Other: Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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**

Reproductive toxicity - Rat - Intraperitoneal  
Effects on Fertility: Abortion.

Reproductive toxicity - Rat - Intraperitoneal  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

Reproductive toxicity - Rat - Subcutaneous  
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).  
Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Reproductive toxicity - Mouse - Oral  
Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

Developmental Toxicity - Mouse - Intraperitoneal  
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

### **Specific target organ toxicity - single exposure**

No data available

### **Specific target organ toxicity - repeated exposure**

No data available

### **Aspiration hazard**

No data available

### **Additional Information**

RTECS: PV6210000

Exposure may cause irritation of eyes, mucous membranes, upper respiratory tract and skin. Effects due to ingestion may include: Nausea, Fatigue, Headache  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Eyes - Eye disease - Based on Human Evidence

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## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity:

Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - 24,600 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	EC50 - Pseudokirchneriella subcapitata (green algae) - 17,000 mg/l - 72 h (OECD Test Guideline 201)

### Persistence and degradability

Biodegradability	Result: 31 % - According to the results of tests of biodegradability this product is not readily biodegradable. (OECD Test Guideline 301D)
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### Bioaccumulative potential

No data available.

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### Other adverse effects

May be harmful to the aquatic environment.  
Stability in water - 0.12 - 1.2 h at 30 °C

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## SECTION 13: DISPOSAL INFORMATION

### Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose of as unused product.

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## SECTION 14: TRANSPORT INFORMATION

### DOT (US)

NA-Number: 1993 Class: NONE Packing group: III  
Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide) (Dimethyl sulfoxide)  
Poison Inhalation Hazard: No



**IMDG**

Not dangerous goods.

**IATA**

Not dangerous goods.

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**SECTION 15: REGULATORY INFORMATION****US Federal Regulations:****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 Hazards**

No SARA Hazards

**US State regulations:****Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Dimethyl sulfoxide

CAS-No.  
67-68-5

**New Jersey Right To Know Components**

Dimethyl sulfoxide

CAS-No.  
67-68-5

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Japanese Regulations:**

Poisonous and Deleterious Substances Control Law

Deleterious Substance:

6-[[2-[[4-(2,4-dichlorophenyl)-5-(5-methyl-1H-imidazol-2-yl)-2-pyrimidinyl]amino]ethyl]amino]-3-pyridinecarbonitrile

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**SECTION 16: OTHER INFORMATION****Other comments:**

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