

SAFETY DATA SHEET

Date: June 22, 2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Oxazole Red Homodimer, 1 mM in DMSO
Catalog Number: 40106
Unit Size: 200 uL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: <http://www.biotium.com>

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION**GHS Classification****Signal word**

WARNING

Health hazards

None

Physical hazards

GHS Physical Hazard 1 –Flammable

GHS Physical Hazard Category 4

Hazard statements

H227 – Combustible liquid

Precautionary statements

P210 –Keep away from heat/sparks/open flames/hot surfaces – No smoking

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P370 + P378 –In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction

WHMIS classification

Flammable liquids, category 4

GHS hazard pictogram

None

HMIS Classification

Health hazard: 1

Flammability: 2

Physical hazards: 0

NFPA Rating

Health hazard: 1

Fire: 2

Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP] None**Classification according to Directive 1999/45/EC** None**Labeling according to Regulation (EC) No 1272/2008[CLP]****Hazard pictogram** None**Signal word** None**Hazard statements** None**Precautionary statements** None

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Name | CAS No. | EC No. | Index No. | Weight % | Classification according to 67/548/EEC | Classification according to regulation (EC)No1278/2008 |
|------|---------|-----------|-----------|----------|--|--|
| DMSO | 67-68-5 | 200-664-3 | - | >99% | N/A | N/A |

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. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

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. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist.
Avoid direct contact with substance.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.
Store at -20°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Substance: DMSO

CAS no. 67-68-5

| Country | Austria | Belgium | Denmark | European Union | France | Germany |
|--------------------|----------|---------|----------|----------------|--------|----------|
| Limit value,8hours | 160mg/m3 | - | 160mg/m3 | - | - | 160mg/m3 |

| | | | | | | | |
|-------------------------|---|---|----------|--|--|--|----------|
| Limit value, short term | - | - | 320mg/m3 | | | | 320mg/m3 |
|-------------------------|---|---|----------|--|--|--|----------|

| Country | Hungary | Italy | Poland | Spain | Sweden | Netherlands | Switzerland |
|-------------------------|---------|-------|--------|-------|----------|-------------|-------------|
| Limit value, 8hours | - | - | - | - | 160mg/m3 | - | 160mg/m3 |
| Limit value, short term | - | - | - | - | 500mg/m3 | - | 320mg/m3 |

| Country | United Kingdom | USA-NIOSH | USA-OSHA | Australia | Canada | Japan | South Korea |
|-------------------------|----------------|-----------|----------|-----------|--------|-------|-------------|
| Limit value, 8hours | - | - | - | - | - | - | - |
| Limit value, short term | - | - | - | - | - | - | - |

Personal protective equipment

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.

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|---|
| Chemical Name | Oxazole Red HomoDimer, 1 mM in DMSO |
| Appearance | liquid |
| Odor | No data available |
| Odor threshold | No data available |
| pH | No data available |
| Melting point/freezing point | No data available |
| Boiling point | No data available |
| Flash point | No data available |
| Evaporate rate | No data available |
| Flammability | No data available |
| Explosive limits | No data available |
| Vapor pressure | No data available |
| Vapor density | No data available |
| Relative density | No data available |
| Solubility | Soluble in water |
| Partition coefficient:n-octanol/water | No data available |
| 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 |

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity DMSO**Oral LD50** Rat – 14,500 mg/kg**Inhalation LC50** Inhalation – rat – 4 h – 40250 ppm**Dermal LD50** Rabbit - > 5,000 mg/kg**Other information on acute toxicity** No data available**Skin corrosion/irritation** No data available**Serious eye damage/eye irritation** No data available**Respiratory or skin sensitization** No data available**Germ cell mutagenicity** Salmonella typhimurium assay (Ames test): negative (+/- activation),
DMSO is used as a neutral solvent in the Ames mutagen test**Carcinogenicity**

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 Experiments have shown reproductive toxicity effects on laboratory animals (Dimethyl Sulfoxide)**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

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 harmful if swallowed.

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

Eyes May cause eye irritation.

Additional Information

RTECS: PV6210000 (DMSO)

12. ECOLOGICAL INFORMATION

Toxicity The LC50(96hrs) for ten species of fish range from 32500 to 43000ppm**Persistence and degradability** No information available**Bioaccumulative potential** No information available**Mobility in soil** No information available**Results of PBT and vPvB assessment** No information available**Other adverse effects** No information available**Additional information** No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

| | |
|---|---|
| IATA, IMDG, DOT (US), TDG | Not dangerous goods during transportation |
| UN number | None |
| UN proper shipping name | None |
| Transport hazard class | None |
| Packing group | None |
| Environmental hazards | None |
| Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code | None |
| Special precaution for user | None |

15. REGULATION INFORMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: DMSO : fire hazard, chronic health hazard
Acute Health Hazard: Yes
Chronic Health Hazard: No
Fire Hazard: Yes
Sudden Release of Pressure Hazard: No
Reactive Hazard: No

WHMIS Hazard Class

Flammable Liquids, category 4

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.

Version no. 1
Revision date (Initials) N/A
Reason for revision N/A

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.