

SAFETY DATA SHEET

# ViaFluor® SE Cell Proliferation Kits

### **SECTION 1: Identification**

# 1.1. Product identifier Trade name ViaFluor® SE Cell Proliferation Kits Other names / Synonyms 30068-T: ViaFluor® 405 SE Cell Proliferation Kit, 1 vial 30068: ViaFluor® 405 SE Cell Proliferation Kit, 10 vials 30086-T: ViaFluor® 488 SE Cell Proliferation Kit, 1 vial 30086: ViaFluor® 488 SE Cell Proliferation Kit, 10 vials 30139-T: ViaFluor® 650 SE Cell Proliferation Kit, 1 vial 30139: ViaFluor® 650 SE Cell Proliferation Kit, 10 vials 30050: ViaFluor® CFSE Cell Proliferation Kit, 10 vials Kit Components: 99972: ViaFluor® 405 SE Cell Proliferation Dye, 100 nmol 99840: ViaFluor® 488 SE Cell Proliferation Dye, 100 nmol 99892: ViaFluor® 650 SE Cell Proliferation Dye, 100 nmol 99937: ViaFluor® CFSE Cell Proliferation Dye, 50 ug 99938: Anhydrous DMSO, 500 uL 99953: Anhydrous DMSO, 150 ul Product no. 30068-T, 30068, 30086-T, 30086, 30139-T, 30139, 30050 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use. Restricted to professional users. Uses advised against Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use. 1.3. Details of the supplier of the safety data sheet Company and address **Biotium**, Inc. 46117 Landing Parkway CA 94538 Fremont USA T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com E-mail techsupport@biotium.com SDS date 2/3/2025 **SDS Version** 1.0 Date of previous version 1/31/2025 (1.0) 1.4. Emergency telephone number Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case See also section 4 "First aid measures".



SECTION 2: Hazard(s) identification

```
2.1. Classification of the substance or mixture
  See individual kit component SDS attached.
  Not classified according to HCS (29 CFR 1910.1200)
2.2. Label elements
  See individual kit component SDS attached.
  Hazard pictogram(s)
     Not applicable.
  Signal word
     Not applicable.
  Hazard statement(s)
  Precautionary statement(s)
      General
      Prevention
      Response
     Storage
      Disposal
  Additional labelling
     Not applicable.
2.3. Other hazards
  See individual kit component SDS attached.
```

SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Does not contain any substances required to report

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

See individual kit component SDS attached.

#### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

#### **General information**

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

In case of discomfort: bring the person into fresh air.

#### Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact



Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of persistent eye irritation or discomfort: Seek medical help.

#### Ingestion

Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed None known.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

#### 5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

# Contaminated areas may be slippery.

# 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

#### 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection.

# 7.2. Conditions for safe storage, including any incompatibilities

# Recommended storage material

#### No specific requirements

#### Storage conditions

Refer to section 7 of each kit component SDS (appended) for proper storage conditions for each kit component. Incompatible materials

No specific requirements

# 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

### SECTION 8: Exposure controls/personal protection



.1. Control parameters No substances are listed	with a permissible expo	osure limit (ref <sup>.</sup> 29 CER 1	910 1000 TABLE 7-1)	
.2. Exposure controls	with a permissible expo	JSule IIIIII (Iel. 29 CFK I	910.1000 TABLE 2-1)	
Apply general control to	-	kposure		
General recommendatio				
	id consumption of food	is not allowed in the wo	rk area.	
Exposure scenarios	re scenarios implemente	ed for this product		
Exposure limits				
	re limits have not been	defined for the substand	ces in this product.	
Appropriate technical me Apply standard preca		e product. Avoid inhalati	ion of vapours.	
Hygiene measures Wash hands after use	-		·	
Measures to avoid enviro No specific requireme	onmental exposure			
ndividual protection measu		protective equipment		
Generally	ares, such as personal p	a occourte equipment		
	quipment with a recogn	ized certification mark,	e.g. the UL mark.	
<b>Respiratory Equipment</b>				
Туре	Class	Colour	Standards	
Not required; except in			N/A	
case of aerosol formation.				
Tormation.				
Skin protection No specific requireme Hand protection				
No specific requireme Hand protection <b>Material</b>	ents. Glove thickness (mm)	Breakthrough time (min.)	Standards	
No specific requireme Hand protection <b>Material</b> Handle with gloves.			Standards	
No specific requireme Hand protection <b>Material</b> Handle with gloves. Gloves must be			Standards	
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No specific requireme Hand protection Material Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique			Standards	
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No specific requireme Hand protection Material 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.	Glove thickness (mm)		Standards	
No specific requireme Hand protection Material 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 Type Safety glasses with	Glove thickness (mm)		Standards	
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SECTION 9: Physical and chemical properties



```
9.1. Information on basic physical and chemical properties
   Physical state
      Liquid
   Color
      No data available
   Odor
      No data available
   Odor threshold (ppm)
      No data available
  рΗ
      No data available
   Density (g/cm<sup>3</sup>)
      No data available
   Relative density
      No data available
   Kinematic viscosity
      No data available
   Particle characteristics
      No data available
Phase changes
   Melting point/freezing point (°F)
      No data available
   Softening point/range (°F)
      Does not apply to liquids.
   Boiling point (°F)
      No data available
   Vapor pressure
      No data available
   Relative vapor density
      No data available
   Decomposition temperature (°F)
      No data available
Data on fire and explosion hazards
   Flash point (°F)
      No data available
   Flammability (°F)
      No data available
   Auto-ignition temperature (°F)
      No data available
   Explosion limits (% v/v)
      No data available
Solubility
   Solubility in water
      Soluble
   n-octanol/water coefficient (LogKow)
      No data available
   Solubility in fat (g/L)
      No data available
9.2. Other information
   Evaporation rate (n-butylacetate = 100)
      No data available
   Other physical and chemical parameters
      No data available.
   Oxidizing properties
      No data available
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SECTION 10: Stability and reactivity



<ul> <li>10.1. Reactivity No data available.</li> <li>10.2. Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage".</li> <li>10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies None known.</li> <li>10.4. Conditions to avoid Heat, flames and sparks.</li> <li>10.5. Incompatible materials No specific requirements</li> <li>10.6. Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced</li> </ul>
SECTION 11: Toxicological information
<ul> <li>11.1. Information on toxicological effects</li> <li>Acute toxicity <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Skin corrosion/Irritation <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Serious eye damage/irritation <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Respiratory sensitisation <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Skin sensitisation <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Skin sensitisation <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Germ cell mutagenicity <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Carcinogenicity <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Carcinogenicity <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Stort-repeated exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>STOT-single exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>STOT-repeated exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>STOT-repeated exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>STOT-repeated exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Stort-repeated exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Stort-repeated exposure <ul> <li>Based on available data, the classification criteria are not met.</li> </ul> </li> <li>Stort-repeated exposure <ul> <li>Based on available data, the classification criteria are not met</li></ul></li></ul>
SECTION 12: Ecological information
12.1. Toxicity No data available.

- No data available.
- 12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

- 12.3. Bioaccumulative potential
- Based on available data, the classification criteria are not met.
- 12.4. Mobility in soil
  - No data available.
- 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Other adverse effects None known.



SECTION 13: Disposal considerations

# RCRA Hazardous waste ("P" and "U" list) (40 CFR 261) None of the components are listed

# Specific labelling

# Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

# SECTION 14: Transport information

	14.1 14.2 UN / ID UN pr	oper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatic n:
DOT			-	-	-	-
IMDG			-	-	-	-
IATA			-	-	-	-
Additional Not dar 14.6. Spec Not app 14.7. Tran	nental hazards information ngerous goods a ial precautions blicable.	according to DOT, IATA ar for user cording to IMO instrumer				
SECTION	15: Regulatory i	information				
TSCA (t Non Clean A Non EPCRA Non EPCRA Non CERCLA Non Hazard This State regu Califorr Non Massac Non New Jee Non New Yee Non New Yee	e of the compor Section 302 e of the compor Section 304 e of the compor section 313 e of the compor ous chemical in product is not s	ntial portion) nents are listed nents are listed nents are listed nents are listed nents are listed nents are listed nents are listed ventory reporting subject to Tier II reporting nents are listed To Know Act nents are listed fow Act nents are listed ow Act nents are listed fow Act nents are listed fow Act	].			





15.4. Restrictions for application Restricted to professional users. 15.5. Demands for specific education No specific requirements. 15.6. Additional information Not applicable. 15.7. Chemical safety assessment No 15.8. Sources OSHA Hazard Communication Standard (29 CFR 1910.1200) **SECTION 16: Other information** The full text of identified uses as mentioned in section 1 None known. Abbreviations and acronyms ACGIH = American Conference of Governmental Industrial Hygienists ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate **BCF** = Bioconcentration Factor CAS = Chemical Abstracts Service CERCLA = Comprehensive Environmental Response Compensation and Liability Act DOT = Department of Transportation EINECS = European Inventory of Existing Commercial chemical Substances EPCRA = Emergency Planning and Community Right-To-Know Act GHS = Globally Harmonized System of Classification and Labelling of Chemicals HCIS = Hazardous Chemical Information System HNOC = Hazards Not Otherwise Classified IARC = International Agency for Research on Cancer IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NFPA = National Fire Protection Association NIOSH = National Institute for Occupational Safety and Health OECD = Organisation for Economic Co-operation and Development OSHA = Occupational Safety and Health Administration PBT = Persistent, Bioaccumulative and Toxic RCRA = Resource Conservation and Recovery Act RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SARA = Superfund Amendments and Reauthorization Act SCL = A specific concentration limit. STEL = Short-term exposure limits STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TSCA = The Toxic Substances Control Act TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative Additional information In accordance with HCS (29 CFR 1910.1200(g)), a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

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. The safety data sheet is validated by

Julianne Davis

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en



SAFETY DATA SHEET

# ViaFluor® SE Cell Proliferation Dye

# SECTION 1: Identification

# 1.1. Product identifier

Trade name

ViaFluor® SE Cell Proliferation Dye

#### Other names / Synonyms

99972: ViaFluor® 405 SE Cell Proliferation Dye, 100 nmol 99840: ViaFluor® 488 SE Cell Proliferation Dye, 100 nmol 99892: ViaFluor® 650 SE Cell Proliferation Dye, 100 nmol 99937: ViaFluor® CFSE Cell Proliferation Dye, 50 ug

#### Product no.

99972, 99840, 99892, 99937

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

#### Relevant identified uses of the substance or mixture

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

#### Uses advised against

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

# 1.3. Details of the supplier of the safety data sheet

# Company and address **Biotium**, **Inc.**

46117 Landing Parkway CA 94538 Fremont USA T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com

# E-mail

techsupport@biotium.com

SDS date

1/31/2025

SDS Version

1.0

#### 1.4. Emergency telephone number

Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case See also section 4 "First aid measures".

SECTION 2: Hazard(s) identification

# 2.1. Classification of the substance or mixture Not classified according to HCS (29 CFR 1910.1200) 2.2. Label elements Hazard pictogram(s) Not applicable. Signal word Not applicable. Hazard statement(s) Precautionary statement(s) General



-
Prevention
-
Response
-
Storage
-
Disposal
-
Additional labelling
Not applicable.

#### 2.3. Other hazards

SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Does not contain any substances required to report

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

No ingredients present at concentrations classified as harmful to health or the environment.

# SECTION 4: First-aid measures

### 4.1. Description of first aid measures

#### General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

In case of discomfort: bring the person into fresh air.

#### Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

#### Eye contact

Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of persistent eye irritation or discomfort: Seek medical help.

#### Ingestion

Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

#### Burns

Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

#### None known.

4.3. Indication of any immediate medical attention and special treatment needed

# Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

# SECTION 5: Fire-fighting measures



#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

# 5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

#### 6.3. Methods and material for containment and cleaning up

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste. See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Smoking, drinking and consumption of food is not allowed in the work area. See section 8 "Exposure controls/personal protection" for information on personal protection.

# 7.2. Conditions for safe storage, including any incompatibilities

Recommended storage material

Always store in containers of the same material as the original container.

# Storage conditions

Desiccate. Freezer -10°C to -35°C. Protect from light. Keep container tightly closed in a dry and well-ventilated place. Incompatible materials Strong acids, strong bases, strong oxidizing agents, and strong reducing

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

#### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

#### 8.2. Exposure controls

Apply general control to prevent unnecessary exposure

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### **Exposure limits**

Occupational exposure limits have not been defined for the substances in this product.

# Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust. Hygiene measures



#### Wash hands after use.

Measures to avoid environmental exposure No specific requirements.

#### Individual protection measures, such as personal protective equipment

#### Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

**Respiratory Equipment** 

Туре	Class	Colour	Standards	
Not required; case of aerosc formation.	•		N/A	

#### Skin protection

No specific requirements.

# Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
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

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

SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

- Physical state
  - Solid
- Color

No relevant or available data due to the nature of the product. Odor

No relevant or available data due to the nature of the product. Odor threshold (ppm)

No relevant or available data due to the nature of the product. pH

No relevant or available data due to the nature of the product. Density (g/cm<sup>3</sup>)

No relevant or available data due to the nature of the product.





Kinematic viscosity Does not apply to solids. Particle characteristics No relevant or available data due to the nature of the product. Phase changes Melting point/freezing point (°F) No relevant or available data due to the nature of the product. Softening point/range (°F) Does not apply to solids. Boiling point (°F) Does not apply to solids. Vapor pressure No relevant or available data due to the nature of the product. Relative vapor density Does not apply to solids. Decomposition temperature (°F) No relevant or available data due to the nature of the product. Data on fire and explosion hazards Flash point (°F) Does not apply to solids. Flammability (°F) No relevant or available data due to the nature of the product. Auto-ignition temperature (°F) No relevant or available data due to the nature of the product. Explosion limits (% v/v) Does not apply to solids. Solubility in water No relevant or available data due to the nature of the product. Explosion limits (% v/v) Does not apply to solids. Solubility in water No relevant or available data due to the nature of the product. n-octanol/water coefficient (LogKow) No relevant or available data due to the nature of the product. Solubility in fat (qL) No relevant or available data due to the nature of the product. 9.2. Other information Other physical and chemical parameters No data available. Oxidizing properties No relevant or available data due to the nature of the product.
SECTION 10: Stability and reactivity
<ul> <li>10.1. Reactivity No data available.</li> <li>10.2. Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage".</li> <li>10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies None known.</li> <li>10.4. Conditions to avoid Heat, flames and sparks.</li> <li>10.5. Incompatible materials Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.</li> <li>10.6. Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced</li> </ul>
SECTION 11: Toxicological information

11.1. Information on toxicological effects Acute toxicity



Based on available data, the classification criteria are not met. Skin corrosion/irritation Based on available data, the classification criteria are not met. Serious eye damage/irritation Based on available data, the classification criteria are not met. **Respiratory sensitisation** Based on available data, the classification criteria are not met. Skin sensitisation Based on available data, the classification criteria are not met. Germ cell mutagenicity Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met. Reproductive toxicity Based on available data, the classification criteria are not met. STOT-single exposure Based on available data, the classification criteria are not met. STOT-repeated exposure Based on available data, the classification criteria are not met. Aspiration hazard Based on available data, the classification criteria are not met. Long term effects None known. Other information None known. SECTION 12: Ecological information 12.1. Toxicity

# No data available.

12.2. Persistence and degradability

Based on available data, the classification criteria are not met.

- 12.3. Bioaccumulative potential
- Based on available data, the classification criteria are not met.
- 12.4. Mobility in soil
- No data available. 12.5. Results of PBT and vPvB assessment
- This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
- 12.6. Other adverse effects None known.

SECTION 13: Disposal considerations

# RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

#### Specific labelling

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / II	14.2 O UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-



		PG*	Env**	informatio n:
NTA	-	-	-	-
Packing group				
<ul> <li>* Environmental hazards</li> <li>Additional information</li> <li>Not dangerous goods according to DOT, IATA and I</li> <li>14.6. Special precautions for user</li> <li>Not applicable.</li> <li>14.7. Transport in bulk according to IMO instruments</li> <li>No data available.</li> </ul>	MDG.			
SECTION 15: Regulatory information				
<ul> <li>15.1. Safety, health and environmental regulations/leg</li> <li>15.2. U.S. Federal regulations <ul> <li>TSCA (the non-confidential portion) <ul> <li>None of the components are listed</li> </ul> </li> <li>Clean Air Act <ul> <li>None of the components are listed</li> </ul> </li> <li>EPCRA Section 302 <ul> <li>None of the components are listed</li> </ul> </li> <li>EPCRA Section 304 <ul> <li>None of the components are listed</li> </ul> </li> <li>EPCRA Section 303 <ul> <li>None of the components are listed</li> </ul> </li> <li>EPCRA Section 313 <ul> <li>None of the components are listed</li> </ul> </li> <li>EPCRA section 313 <ul> <li>None of the components are listed</li> </ul> </li> <li>CERCLA <ul> <li>None of the components are listed</li> </ul> </li> <li>Hazardous chemical inventory reporting <ul> <li>This product is not subject to Tier II reporting.</li> </ul> </li> <li>State regulations</li> <li>California / Prop. 65 <ul> <li>None of the components are listed</li> </ul> </li> <li>Massachusetts / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>Massachusetts / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>New Jersey / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>New York / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>New York / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>New York / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>Pennsylvania / Right To Know Act <ul> <li>None of the components are listed</li> </ul> </li> <li>15.4. Restrictions for application <ul> <li>Restricted to professional users.</li> </ul> </li> <li>15.5. Demands for specific education <ul> <li>No specific requirements.</li> </ul> </li> <li>15.6. Additional information <ul> <li>Not applicable.</li> </ul> </li> <li>15.7. Chemical safety assessment <ul> <li>No</li> </ul> </li> <li>15.8. Sources</li> <li>OSHA Hazard Communi</li></ul></li></ul>		nce or mixture		

The full text of identified uses as mentioned in section 1



None known.

# Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service CERCLA = Comprehensive Environmental Response Compensation and Liability Act DOT = Department of Transportation EINECS = European Inventory of Existing Commercial chemical Substances EPCRA = Emergency Planning and Community Right-To-Know Act GHS = Globally Harmonized System of Classification and Labelling of Chemicals HCIS = Hazardous Chemical Information System HNOC = Hazards Not Otherwise Classified IARC = International Agency for Research on Cancer IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organisation for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

### Additional information

In accordance with HCS (29 CFR 1910.1200(g)), a safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

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 quide. 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.

The safety data sheet is validated by

Julianne Davis

# Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: US-en



SAFETY DATA SHEET

# Anhydrous DMSO

### **SECTION 1: Identification**

#### 1.1. Product identifier

Trade name

Anhydrous DMSO

#### ▼ Other names / Synonyms

90082: Anhydrous DMSO, 10 mL 99938: Anhydrous DMSO, 500 uL 99953: Anhydrous DMSO, 150 uL 99953-1: Anhydrous DMSO, 250 uL

#### ▼ Product no.

90082 , 99938, 99953, 99953-1

Other means of identification

CAS No.: 67-68-5

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

Relevant identified uses of the substance or mixture

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

#### Uses advised against

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use. 1.3. Details of the supplier of the safety data sheet

# Company and address

# Biotium, Inc.

46117 Landing Parkway CA 94538 Fremont USA T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com E-mail techsupport@biotium.com SDS date 2/1/2025 **SDS Version** 2.0 Date of previous version 1/31/2025 (2.0) 1.4. Emergency telephone number Contact the poison control at 1-800-222-1222 (24/7) or use the webPOISONCONTROL® (triage.webpoisoncontrol.org) to get specific guidance for your case

See also section 4 "First aid measures".

SECTION 2: Hazard(s) identification

### OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

2.1. Classification of the substance or mixture

Flam. Liq. 2; H225, Highly flammable liquid and vapour.

# 2.2. Label elements

Hazard pictogram(s)



Signal word
Danger
Hazard statement(s)
Highly flammable liquid and vapour. (H225)
Precautionary statement(s)
General
-
Prevention
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210) Keep container tightly closed. (P233)
Response
In case of fire: Use water mist/carbon dioxide/alcohol-resistant foam to extinguish. (P370+P378)
Storage
Store in a well-ventilated place. Keep cool. (P403+P235)
Disposal
Dispose of contents/container in accordance with local regulation (P501)
Additional labelling
Not applicable.
2.3. Other hazards

SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Product/substance	Identifiers	% w/w	Classification	Note
Dimethyl sulfoxide	CAS No.: 67-68-5	>99%		

#### 3.2. Mixtures

Not applicable. This product is a substance.

Where the concentration of an ingredient is expressed as a range the exact concentration has been withheld as a trade secret.

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

No ingredients present at concentrations classified as harmful to health or the environment.

#### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

#### General information

If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

# Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact



If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

#### 4.2. Most important symptoms and effects, both acute and delayed

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### Information to medics

Bring this safety data sheet or the label from this product.

**SECTION 5: Fire-fighting measures** 

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

# 5.2. Special hazards arising from the substance or mixture

Highly flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides

# Carbon oxides (CO / CO2)

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the Poison Help Line on 1-800-222-1222 (24/7) in order to obtain further advice.

SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. Keep unauthorized persons away from the spill

# 6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage



#### 7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/lighting/ventilating] equipment.

Use non-sparking tools.

Take action to prevent static discharges.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

#### 7.2. ▼ Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Liquid class

Flammable liquid / Class IB (NFPA 30)

#### Storage conditions

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

#### Desiccate.

Room temperature or below. For Biotium products where the label indicates room temperature or RT, this implies storage in ambient conditions between 20°C and 30°C.

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

#### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No substances are listed with a permissible exposure limit (ref: 29 CFR 1910.1000 TABLE Z-1)

#### 8.2. Exposure controls

Apply general control to prevent unnecessary exposure

# General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

## Exposure scenarios

There are no exposure scenarios implemented for this product.

#### **Exposure limits**

Occupational exposure limits have not been defined for the substances in this product.

#### Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

# Measures to avoid environmental exposure

No specific requirements.

#### Individual protection measures, such as personal protective equipment

### Generally

Use only protective equipment with a recognized certification mark, e.g. the UL mark.

# Respiratory Equipment

Туре	Class	Colour	Standards	
Not required; e case of aerosol formation.	•		N/A	

#### Skin protection

No specific requirements. Hand protection



Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
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.				
e protection				
Туре	Standards			
Safety glasses with side-shields	EN166			



conforming to EN166. Use equipment for eye protection tested and approved under appropriate

government standards such as NIOSH (US) or

EN 166(EU).

# 9.1. Information on basic physical and chemical properties Physical state Liquid Color Clear Odor Mild Odor threshold (ppm) No relevant or available data due to the nature of the product. pН No relevant or available data due to the nature of the product. Density (g/cm<sup>3</sup>) No relevant or available data due to the nature of the product. Kinematic viscosity No relevant or available data due to the nature of the product. Particle characteristics Does not apply to liquids. Phase changes Melting point/freezing point (°F) Melting point/freezing point (°C) 16-19 Softening point/range (°F) Does not apply to liquids. Boiling point (°F) 372 Boiling point (°C) 189





Vapor pressure No relevant or available data due to the nature of the product. Relative vapor density 1.1 g/mL Decomposition temperature (°F) No relevant or available data due to the nature of the product. Data on fire and explosion hazards Flash point (°F) Flash point (°C) 0 Flammability (°F) The material is ignitable. Auto-ignition temperature (°F) 572 - 576 Auto-ignition temperature (°C) 300 - 302 Explosion limits (% v/v) No relevant or available data due to the nature of the product. Solubility Solubility in water No relevant or available data due to the nature of the product. n-octanol/water coefficient (LogKow) Ω Solubility in fat (g/L) No relevant or available data due to the nature of the product. 9.2. Other information Decomposition temperature (Self-reactive substances and mixtures) (°C) > 190 Other physical and chemical parameters No data available. **Oxidizing properties** No relevant or available data due to the nature of the product. SECTION 10: Stability and reactivity 10.1. Reactivity No data available. 10.2. Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage". 10.3. Possibility of hazardous reactions, including those associated with foreseeable emergencies None known. 10.4. Conditions to avoid Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure. Heat, flames and sparks. 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

#### Acute toxicity

Dimethyl sulfoxide	
OECD 401	
Rat, male/female	
Oral	
_D50	



Result:	28,300 mg/kg
Product/substance	Dimethyl sulfoxide
Test method:	OECD 403
Species:	Rat, male/female
Route of exposure:	Inhalation
Test:	LC50
Result:	4h - > 5.33 mg/L
Product/substance	Dimethyl sulfoxide
Species:	Rat, male/female
Route of exposure:	Dermal
Test:	LD50
Result:	40,000 mg/kg
Skin corrosion/irritation Product/substance Test method: Species: Description:	Dimethyl sulfoxide OECD 404 Rabbit Slight irritation 4 h
Serious eye damage/irrita	ation
Product/substance	Dimethyl sulfoxide
Test method:	OECD 405
Species:	Rabbit
Description:	Slight irritation - 24 h
Respiratory sensitisation Product/substance Test method: Species: Description:	Dimethyl sulfoxide OECD 406 Guinea pig Negative
Product/substance	Dimethyl sulfoxide
Test method:	OECD 429
Species:	Mouse
Description:	Negative
Skin sensitisation Product/substance Test method: Species: Description:	Dimethyl sulfoxide OECD 406 Guinea pig Negative
Product/substance	Dimethyl sulfoxide
Test method:	OECD 429
Species:	Mouse
Description:	Negative
Germ cell mutagenicity Product/substance Test method: Species: Description:	Dimethyl sulfoxide OECD 471 S. typhimurium Negative
Product/substance	Dimethyl sulfoxide
Test method:	OECD Test Guideline 479
Species:	Chinese Hamster Ovary (CHO)
Description:	Negative
Product/substance	Dimethyl sulfoxide
Test method:	OECD 473
Species:	Chinese Hamster Ovary (CHO)
Description:	Negative
Product/substance	Dimethyl sulfoxide



Test method:	OECD 474	
Species:	Rat	
Description:	Negative	

#### Carcinogenicity

Based on available data, the classification criteria are not met.

# Reproductive toxicity

Based on available data, the classification criteria are not met.

# STOT-single exposure

Based on available data, the classification criteria are not met.

# STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### Other information

None known.

#### SECTION 12: Ecological information

# 12.1. Toxicity

12.1. Toxicity Product/substance Test method: Species: Duration: Test: Result:	Dimethyl sulfoxide OECD 203 Fish, Danio rerio 96 hours LC50 25,000 mg/L
Product/substance Test method: Species: Duration: Test: Result:	Dimethyl sulfoxide OECD 202 Daphnia 48 hours EC50 24,600 mg/L
Product/substance Test method: Species: Duration: Test: Result:	Dimethyl sulfoxide OECD 201 Algae, Pseudokirchneriella subcapitata 72 hours ErC50 17,000 mg/L
Product/substance	Dimethyl sulfoxide
Test method: Species:	ISO 8192 Bacteria
Compartment:	Activated Sludge Plant
Duration:	30 min.
Test:	EC50
Result:	10 - 100 mg/L
12.2. Persistence and de	
Based on available da	a, the classification criteria are not met.
12.3. Bioaccumulative p	tential
Product/substance	Dimethyl sulfoxide

Dimethyl sulfoxide
Potential for bioaccumulation
OECD Test Guideline 301D

#### 12.4. Mobility in soil



No data available.

# 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. Other adverse effects

This product contains substances with the potential of bioaccumulation resulting in the risk of accumulation in the food chain. Bioaccumulative substances are concentrated in adipose tissue and are not easily secreted.

SECTION 13: Disposal considerations

# RCRA Hazardous waste ("P" and "U" list) (40 CFR 261)

None of the components are listed

Specific labelling

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	14.4 14.5 Other PG* Env** informatio n:
DOT		-	
IMDG		-	
IATA		-	

### \* Packing group

\*\* Environmental hazards

#### Additional information

This product is within scope of the regulations of transport of dangerous goods.

- 14.6. Special precautions for user
  - Not applicable.
- 14.7. Transport in bulk according to IMO instruments No data available.

SECTION 15: Regulatory information

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

#### 15.2. U.S. Federal regulations

TSCA (the non-confidential portion) Dimethyl sulfoxide is listed **Clean Air Act** None of the components are listed **EPCRA Section 302** None of the components are listed **EPCRA Section 304** None of the components are listed **EPCRA** section 313 None of the components are listed **CFRCLA** None of the components are listed Hazardous chemical inventory reporting This product is subject to Tier II reporting. State regulations California / Prop. 65

None of the components are listed

Massachusetts / Right To Know Act None of the components are listed



#### New Jersey / Right To Know Act

Dimethyl sulfoxide / Substance number: 4145 Dimethyl sulfoxide is on the Special Health Hazard Substance List

#### New York / Right To Know Act

None of the components are listed Pennsylvania / Right To Know Act

None of the components are listed

#### 15.4. Restrictions for application

Restricted to professional users.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

15.5. Demands for specific education

# No specific requirements.

15.6. Additional information

Not applicable.

15.7. Chemical safety assessment

No

15.8. Sources

OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 16: Other information

#### The full text of identified uses as mentioned in section 1

None known.

#### Abbreviations and acronyms

ACGIH = American Conference of Governmental Industrial Hygienists

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CERCLA = Comprehensive Environmental Response Compensation and Liability Act

DOT = Department of Transportation

EINECS = European Inventory of Existing Commercial chemical Substances

EPCRA = Emergency Planning and Community Right-To-Know Act

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HCIS = Hazardous Chemical Information System

HNOC = Hazards Not Otherwise Classified

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of

1978. ("Marpol" = marine pollution)

NFPA = National Fire Protection Association

NIOSH = National Institute for Occupational Safety and Health

OECD = Organisation for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

PBT = Persistent, Bioaccumulative and Toxic

RCRA = Resource Conservation and Recovery Act

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SARA = Superfund Amendments and Reauthorization Act

SCL = A specific concentration limit.

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TSCA = The Toxic Substances Control Act

TWA = Time weighted average

UN = United Nations



UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

# Additional information

The classification of the mixture in regard to physical hazards has been based on experimental data. 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.

# The safety data sheet is validated by

Julianne Davis

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

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