

### SAFETY DATA SHEET

# BactoView™ Viability Kits

#### **SECTION 1: Identification**

### 1.1. Product identifier

#### Trade name

BactoView™ Viability Kits

### **▼** Other names / Synonyms

32019: BactoView™ Viability Kit (Green/Red), 1 kit 32020: BactoView™ Viability Kit (Green/Far-Red), 1 kit

#### Kit Components:

40109: BactoView™ Dead 570/585, 100 uL 40111: BactoView™ Dead 655/670, 100 uL

99877-100UL: BactoView™ Viability Green Counterstain, 100 uL

#### Product no.

32019, 32020

### 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

None known.

### 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

6/16/2025

# **SDS Version**

1.0

# Date of previous version

5/1/2024 (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

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Prevention

-

Response

-

Storage

Disposal

### Additional labelling

Not applicable.

### 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

-

### 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

### 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

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
	n/a	n/a	n/a		n/a
Sk	in protection				
	Recommended	Type/Category		Standards	
	n/a	n/a		n/a	

### Hand protection

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

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

No specific requirements.

# 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

рН

No data available

Density (g/cm³)

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 in water

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (q/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

# 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

Heat, flames and sparks.

10.5. Incompatible materials

No specific requirements

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

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

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

# 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 proper shipping name	14.3 Hazard class(es)	14.4 14.: PG* Env	
DOT	-	-		-
IMDG		-		-
IATA		-		-

<sup>\*</sup> Packing group

### Additional information

Not dangerous goods according to DOT, IATA and IMDG.

# 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to IMO instruments

No data available.

# **SECTION 15: Regulatory information**

<sup>\*\*</sup> Environmental hazards



### 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)

None of the components are 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

#### **CERCLA**

None of the components are listed

### ▼ Hazardous chemical inventory reporting

This product is not 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

None of the components are listed

# 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.

### 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

# BactoView™ Dead Stains, 1000X in DMSO

#### **SECTION 1: Identification**

#### 1.1. Product identifier

### **▼**Trade name

BactoView™ Dead Stains, 1000X in DMSO

### Other names / Synonyms

40107-T: BactoView™ Dead 500/515, 20 uL 40107: BactoView™ Dead 500/515, 100 uL 40108-T: BactoView™ Dead 560/570, 20 uL 40109-T: BactoView™ Dead 570/585, 20 uL 40109: BactoView™ Dead 570/585, 100 uL 40110-T: BactoView™ Dead 600/615, 20 uL 40110: BactoView™ Dead 600/615, 100 uL 40111-T: BactoView™ Dead 655/670, 20 uL 40111: BactoView™ Dead 655/670, 100 uL 40112-T: BactoView™ Dead 690/710, 20 uL 40112: BactoView™ Dead 690/710, 100 uL 40113-T: BactoView™ Dead 760/780, 20 uL 40113: BactoView™ Dead 760/780, 20 uL 40113: BactoView™ Dead 760/780, 100 uL

#### Product no

40107-T, 40107, 40108-T, 40108, 40109-T, 40109, 40110-T, 40110, 40111-T, 40111, 40112-T, 40112, 40113-T, 40113

# ▼ 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

None known.

### 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

6/11/2025

**SDS Version** 

2.0

# Date of previous version

5/1/2024 (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.

### SECTION 3: Composition/Information on Ingredients

### 3.1. ▼Substances

Does not contain any substances required to report

### 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

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### 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

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

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

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

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

# Recommended storage material

No specific requirements

# Storage conditions

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

Freezer -10°C to -35°C.

Protect from light.

### 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

### 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

Wash hands after use.

# Measures to avoid environmental exposure

No specific requirements.

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

#### Generally

Typo

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

# **Respiratory Equipment**

	туре	Class	Coloui		Standards
	n/a	n/a	n/a		n/a
Ski	n protection				
	Recommended	Type/Category		Standards	
	n/a	n/a		n/a	

Standards

Colour

# Hand protection

iand 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

No specific requirements.

### 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 (q/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 in water

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

# 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

No specific requirements

### 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

Product/substance Dimethyl sulfoxide
Test method: OECD 401
Species: Rat, male/female

Route of exposure: Oral
Test: LD50
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

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

### ▼ Skin corrosion/irritation

Product/substance Dimethyl sulfoxide

Test method: OECD 404 Species: Rabbit

Description: Slight irritation 4 h

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

### ▼ Serious eye damage/irritation

Product/substance Dimethyl sulfoxide
Test method: OECD 405
Species: Rabbit

Species: Rabbit
Description: Slight irritation - 24 h

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

# ▼ Respiratory sensitisation

Product/substance Dimethyl sulfoxide
Test method: OECD 406
Species: Guinea pig
Description: Negative

Product/substance Dimethyl sulfoxide

Test method: OECD 429
Species: Mouse
Description: Negative

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

### **▼** Skin sensitisation

Product/substance Dimethyl sulfoxide
Test method: OECD 406
Species: Guinea pig
Description: Negative

Product/substance Dimethyl sulfoxide

Test method: OECD 429 Species: Mouse



Description: Negative

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

▼ Germ cell mutagenicity

Product/substance Dimethyl sulfoxide
Test method: OECD 471
Species: S. typhimurium
Description: 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

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

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

Product/substance Dimethyl sulfoxide
Test method: OECD 203
Species: Fish, Danio rerio
Duration: 96 hours
Test: LC50
Result: 25,000 mg/L

Product/substance Dimethyl sulfoxide
Test method: OECD 202
Species: Daphnia
Duration: 48 hours
Test: EC50
Result: 24,600 mg/L

Product/substance Dimethyl sulfoxide

Test method: OECD 201

Species: Algae, Pseudokirchneriella subcapitata



 Duration:
 72 hours

 Test:
 ErC50

 Result:
 17,000 mg/L

Product/substance Dimethyl sulfoxide

Test method: ISO 8192 Species: Bacteria

Compartment: Activated Sludge Plant

 Duration:
 30 min.

 Test:
 EC50

 Result:
 10 - 100 mg/L

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

# 12.2. Persistence and degradability

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

### 12.3. ▼ Bioaccumulative potential

Product/substance Dimethyl sulfoxide

Conclusion: Potential for bioaccumulation
Test: 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 UN / I	14.2 D UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

<sup>\*</sup> Packing group

### Additional information

Not dangerous goods according to DOT, IATA and IMDG.

### 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)

<sup>\*\*</sup> Environmental hazards



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

**CERCLA** 

None of the components are listed

▼ Hazardous chemical inventory reporting

This product is not 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

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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

# BactoView™ Viability Green Counterstain

### **SECTION 1: Identification**

### 1.1. Product identifier

Trade name

BactoView™ Viability Green Counterstain

**▼** Other names / Synonyms

99877-100UL: BactoView™ Viability Green Counterstain, 100 uL

Product no.

99877

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

None known.

# 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

6/16/2025

SDS Version

1.0

# Date of previous version

5/1/2024 (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.

# SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Does not contain any substances required to report

### 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

-

### 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

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

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

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

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

### Recommended storage material

No specific requirements

### Storage conditions

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

Freezer -10°C to -35°C.

Protect from light.

# 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

### 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

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
	n/a	n/a	n/a		n/a
Skir	n protection				
	Recommended	Type/Category		Standards	
	n/a	n/a		n/a	

#### 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

Туре	Standards	
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).	EN166	

# 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/cm³)



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 in water

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (q/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

# 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

No specific requirements

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

Product/substance Dimethyl sulfoxide

Test method: OECD 401
Species: Rat, male/female

Route of exposure: Oral Test: LD50

Result: 28,300 mg/kg

Product/substance Dimethyl sulfoxide
Test method: OECD 403
Species: Rat, male/female
Route of exposure: Inhalation
Test: LC50

Result:  $4h \rightarrow 5.33 \text{ mg/L}$ 

Product/substance Dimethyl sulfoxide Species: Rat, male/female

Route of exposure: Dermal
Test: LD50
Result: 40,000 mg/kg

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

#### ▼ Skin corrosion/irritation

Product/substance Dimethyl sulfoxide

Test method: OECD 404 Species: Rabbit

Description: Slight irritation 4 h

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

# ▼ Serious eye damage/irritation

Product/substance Dimethyl sulfoxide

Test method: OECD 405 Species: Rabbit

Description: Slight irritation - 24 h

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

# ▼ Respiratory sensitisation

Product/substance Dimethyl sulfoxide
Test method: OECD 406
Species: Guinea pig
Description: Negative

Product/substance Dimethyl sulfoxide

Test method: OECD 429
Species: Mouse
Description: Negative

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

### **▼** Skin sensitisation

Product/substance Dimethyl sulfoxide

Test method: OECD 406
Species: Guinea pig
Description: Negative

Product/substance Dimethyl sulfoxide
Test method: OECD 429
Species: Mouse
Description: Negative

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

# **▼** Germ cell mutagenicity

Product/substance Dimethyl sulfoxide

Test method: OECD 471



Species: S. typhimurium

Description: 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

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

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

Product/substance Dimethyl sulfoxide
Test method: OECD 203
Species: Fish, Danio rerio
Duration: 96 hours
Test: LC50
Result: 25,000 mg/L

Product/substance Dimethyl sulfoxide
Test method: OECD 202
Species: Daphnia
Duration: 48 hours
Test: EC50
Result: 24,600 mg/L

Product/substance Dimethyl sulfoxide

Test method: OECD 201

Species: Algae, Pseudokirchneriella subcapitata

 Duration:
 72 hours

 Test:
 ErC50

 Result:
 17,000 mg/L

Product/substance Dimethyl sulfoxide



Test method: ISO 8192 Species: Bacteria

Compartment: Activated Sludge Plant

 Duration:
 30 min.

 Test:
 EC50

 Result:
 10 - 100 mg/L

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

### 12.2. Persistence and degradability

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

#### 12.3. Bioaccumulative potential

Product/substance Dimethyl sulfoxide

Conclusion: Potential for bioaccumulation
Test: 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 UN / I	14.2 D UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatio n:
DOT	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

<sup>\*</sup> Packing group

# Additional information

Not dangerous goods according to DOT, IATA and IMDG.

# 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

<sup>\*\*</sup> Environmental hazards



#### **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 not 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

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### Additional information

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### The safety data sheet is validated by

**Julianne Davis** 

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Country-language: US-en