

SAFETY DATA SHEET

BactoView[™] Viability Kits

SECTION 1: Identification

1.1. Product identifier Trade name BactoView[™] Viability Kits Other names / Synonyms 40109: BactoView[™] Dead 570/585, 100 uL 40111: BactoView[™] Dead 655/670, 100 uL 99877: 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 5/1/2024 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.

2.3. Other hazards

Additional warnings

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

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

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) and continue until irritation stops. Remove contact lenses.

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

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. Fire fighters should wear appropriate personal protective equipment.

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 temperature

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	
Skin protection				

Recommended Type/Category Standards n/a n/a n/a

Hand protection Material	Glove thickness (mm)	Breakthrough time	Standards	
Wateria	diove thickness (min)	(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				

dry hands. Eye protection

No specific requirements.

after use in accordance with applicable laws and good laboratory practices. Wash and

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Physical state Liquid Colour

No data available Odour No data available Odour threshold (ppm) No data available рΗ No data available Density (q/cm³) No data available **Relative density** No data available Kinematic viscosity No data available Particle characteristics No data available

Phase changes



Melting point (°F) No data available Softening point/range (waxes and pastes) (°F) Does not apply to liquids. Boiling point (°F) No data available Vapour pressure No data available Relative vapour 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
None known.
10.4. Conditions to avoid
Heat, flames and sparks.
10.5. Incompatible materials
No specific requirements
10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

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.

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 / ID	14.2 9 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
DOT	-		-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-
* Packing						

** Environmental hazards



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) 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 State regulations California / Prop. 65 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 State regulation State regulation State are used. State regulations California / Prop. 65 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 State regulation State are disted to professional users. State Restrictions for application Restricted to professional users. State are diverted	 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 Annex II of Marpol and the IBC Code No data available.
 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 303 None of the components are listed EPCRA Section 313 None of the components are listed CERCLA None of the components are listed CERCLA None of the components are listed State regulations California / Prop. 65 None of the components are listed Massachusetts / Right To Know Act None of the components are listed Massachusetts / Right To Know Act None of the components are listed New York / Right To Know Act None of the components are listed New York / Right To Know Act None of the components are listed New York / Right To Know Act None of the components are listed New York / Right To Know Act None of the components are listed None step is the components are listed None step is the components are listed None of the components are listed None for the components are listed None for the components are listed None of the components are listed None for the components are listed None for the components are listed None for specific education No specific requirements. 15.5. Demands for specific education Not applicable. 15.7. Chemical safety assessment No Sources OSHA Hazard Communication Standard (29 CFR 1910.1200) SECTION 16: Other information None known. 	SECTION 15: Regulatory information
None known.	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 313 None of the components are listed CERCLA None of the components are listed State regulations California / Prop. 65 None of the components are listed Massachusetts / Right To Know Act None of the components are listed New York / Right To Know Act None of the components are listed New York / 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 SECTION 16: Other information
ACGIH = American Conference of Governmental Industrial Hygienists	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

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, 500X in Water

SECTION 1: Identification

1.1. Product identifier

Trade name

BactoView[™] Dead Stains, 500X in Water

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 560/570, 100 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: 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, 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 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 5/1/2024

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

Additional warnings

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

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

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) and continue until irritation stops. Remove contact lenses.

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

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. Fire fighters should wear appropriate personal protective equipment.

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 temperature

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)



Exposure scenarios There are no exposur Exposure limits Occupational exposur Appropriate technical m Apply standard preca Hygiene measures Wash hands after use Measures to avoid envir No specific requirement Individual protection meas Generally Use only protective e	ons nd consumption of food is re scenarios implemente re limits have not been o easures nutions during use of the e. onmental exposure ents.	s not allowed in th d for this product lefined for the sul product. Avoid in	ostances in this product. halation of vapours. nt	
Respiratory Equipment	-			
Туре	Class	Colour	Standards	
n/a	n/a	n/a	n/a	
Skin protection				
Recommended	Type/Category	Sta	ndards	
n/a	n/a	n/a		
Hand protection				
Material	Glove thickness (mm)	Breakthrough ti (min.)	me 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	2			

Eye protection

No specific requirements.

and good laboratory practices. Wash and dry hands.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid Colour No data available Odour No data available Odour threshold (ppm) No data available pH 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 (°F) No data available Softening point/range (waxes and pastes) (°F) Does not apply to liquids. Boiling point (°F) No data available Vapour pressure No data available Relative vapour 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
- None known.

10.4. Conditions to avoid

- Heat, flames and sparks.
- 10.5. Incompatible materials No specific requirements

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.



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 eve 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



ТОСТ	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
	-	-	-	-	-	-
MDG	-	-	-	-	-	-
ATA	-	-	-	-	-	-
14.6. Spe Not aj 14.7. Tra	mental h al inform angerou ecial prec pplicable	nation s goods according to DOT, IAT cautions for user s. n bulk according to Annex II o				
SECTION	N 15: Reg	gulatory information				
TSCA (No Clean No EPCR/ No EPCR/ No CERCL No	(the non- one of the Air Act one of the A Section one of the A Section one of the A section one of the A section	e components are listed 304 e components are listed 313 e components are listed e components are listed				
No Massa	rnia / Pro one of the achusetts	op. 65 e components are listed s / Right To Know Act				
New J No New Y No	ersey / R one of the ork / Rig one of the	e components are listed ight To Know Act e components are listed yht To Know Act e components are listed				
No 15.4. Res Restri	s <mark>trictions</mark> cted to p	Right To Know Act e components are listed for application professional users. or specific education				
No 15.4. Res Restri 15.5. Der No sp 15.6. Ado Not ap	strictions cted to p mands fo ecific reo ditional in pplicable	e components are listed for application professional users. or specific education quirements. nformation				

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.

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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<sup>™</sup> Viability Green Counterstain
  Other names / Synonyms
     99877- 100 uĹ
  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
     5/1/2024
  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

Additional warnings

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

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

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) and continue until irritation stops. Remove contact lenses.

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

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. Fire fighters should wear appropriate personal protective equipment.

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 temperature

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 recommendatio Smoking, drinking an	ons id consumption of food is	s not allowed in the wo	rk area.
Exposure scenarios There are no exposu	re scenarios implemented	d for this product.	
Exposure limits Occupational exposu	re limits have not been d	efined for the substand	es in this product.
Appropriate technical m			
Hygiene measures Wash hands after use	-		
Measures to avoid enviro No specific requireme	onmental exposure		
Individual protection measured		otective equipment	
	quipment with a recogniz	zed certification mark, o	e.g. the UL mark.
Respiratory Equipment			
Туре	Class	Colour	Standards
n/a	n/a	n/a	n/a
Skin protection			
Recommended	Type/Category	Standard	S
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.	2		
Eye protection	Standards		
Type			
Safety glasses with side-shields conforming to EN166. Use equipment for eye	EN166		

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid Colour No data available



Odour No data available Odour threshold (ppm) No data available pН No data available Density (q/cm³) No data available **Relative densitv** No data available **Kinematic viscosity** No data available Particle characteristics No data available Phase changes Melting point (°F) No data available Softening point/range (waxes and pastes) (°F) Does not apply to liquids. Boiling point (°F) No data available Vapour pressure No data available Relative vapour 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



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

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects Acute toxicity Dimethyl sulfoxide Product/substance Test method: OECD 401 Rat, male/female Species: Route of exposure: Oral LD50 Test: Result: 28,300 mg/kg Product/substance Dimethyl sulfoxide **OECD** 403 Test method: Species: Rat, male/female Inhalation Route of exposure: Test: LC50 4h - > 5.33 mg/L Result: Product/substance Dimethyl sulfoxide Species: Rat, male/female Dermal Route of exposure: Test: LD50 40,000 mg/kg Result: Skin corrosion/irritation Product/substance Dimethyl sulfoxide Test method: OECD 404 Species: Rabbit Description: Slight irritation 4 h Serious eye damage/irritation Product/substance Dimethyl sulfoxide Test method: OECD 405 Species: Rabbit Description: Slight irritation - 24 h Respiratory sensitisation Product/substance Dimethyl sulfoxide Test method: OECD 406 Species: Guinea pig Description: Negative Product/substance Dimethyl sulfoxide Test method: **OECD 429** Mouse Species: Description: Negative Skin sensitisation Product/substance Dimethyl sulfoxide OECD 406 Test method: Guinea pig Species: Description: 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 Dimethyl sulfoxide Product/substance Test method: OECD 203 Fish, Danio rerio Species: Duration: 96 hours Test: 1C50Result: 25,000 mg/L Product/substance Dimethyl sulfoxide Test method: OECD 202 Species: Daphnia 48 hours Duration: 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

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

* Packing group

** Environmental hazards

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 Annex II of Marpol and the IBC Code 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 CERCLA None of the components are listed 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

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

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