SAFETY DATA SHEET

Live-or-Dye NucFix™ Red Staining Kit

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Live-or-Dye NucFix™ Red Staining Kit

Other names / Synonyms

32010-T: Live-or-Dye NucFix™ Red Staining Kit, 50 assays
32010: Live-or-Dye NucFix™ Red Staining Kit, 200 assays

Kit Components:
32010A: Live-or-Dye NucFix™ Red Dye, 1 vial or 4 vials
99953: Anhydrous DMSO, 150 uL
99953-1: Anhydrous DMSO, 250 uL

Product no.

32010-T, 32010

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 and industrial use.

Use descriptors (REACH)

Sectors of use	**Description**
SU 24	Scientific research and development
Product category	**Description**
PC 21	Laboratory Chemicals
Process category	**Description**
PROC 15	Use as laboratory reagent

Uses advised against

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

1.3. Details of the supplier of the safety data sheet

Company and address

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

E-mail

techsupport@biotium.com

Revision

24/09/2026

SDS Version

1.0

1.4. Emergency telephone number

Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day)
See also section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
See individual kit component SDS attached.
Not classified according to Regulation (EC) No. 1272/2008 (CLP).

2.2. Label elements
See individual kit component SDS attached.

Hazard pictogram(s)
Not applicable.

Signal word
Not applicable.

Hazard statement(s)
Not applicable.

Precautionary statement(s)
General
Not applicable.

Prevention
Not applicable.

Response
Not applicable.

Storage
Not applicable.

Disposal
Not applicable.

Hazardous substances
Contains no substances that need to be listed on the label.

Additional labelling

2.3. Other hazards
See individual kit component SDS attached.

Additional warnings
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable. This product is a mixture.

3.2. Mixtures
Contains no components subject to disclosure requirements.

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

Other information
-
See individual kit component SDS attached.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet. The doctor can contact the Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day)
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

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

Skin contact

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

Eye contact

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

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

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: Firefighting 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

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

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 in the Belgium list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

No data available.

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

See the exposure scenario appended to the safety data sheet. Ensure that the operational conditions and risk management measures in the relevant exposure scenario are complied with.

Exposure limits

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

Appropriate technical measures

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

Hygiene measures

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

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards	
Not required; except in case of aerosol formation.			N/A	

Skin protection

No specific requirements.

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.				

Eye protection

Type	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

Colour

No data available

Odour / Odour threshold

No data available

pH

No data available

Density (g/cm^3)

No data available

Relative density

No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

Phase changes

Melting point/Freezing point (°C)

No data available

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)
No data available
Vapour pressure
No data available
Relative vapour density
No data available
Decomposition temperature (°C)
No data available
Data on fire and explosion hazards
Flash point (°C)
No data available
Flammability (°C)
No data available
Auto-ignition temperature (°C)
No data available
Lower and upper explosion limit (% v/v)
No data available
Solubility
Solubility in water
No data available.
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
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
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 sensitization
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.

Symptoms related to the physical, chemical and toxicological characteristics
None known.

11.2. Information on other hazards

Endocrine disrupting properties
This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

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. Endocrine disrupting properties
This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product is not covered by regulations on dangerous waste.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code
Not applicable.

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 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/ADN/RID	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group
** Environmental hazards
*** UN number or ID number

Additional information

Not dangerous goods according to ADR/ADN/RID, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime 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

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

The full text of identified uses as mentioned in section 1

SU 24 = Scientific research and development
PROC 15 = Use as laboratory reagent
PC 21 = Laboratory Chemicals

Abbreviations and acronyms

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
CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = Effective concentration
ED = Effective dose
EINECS = European Inventory of Existing Commercial chemical Substances
EL = Effective Loading
ErC = Concentration associated with x% growth rate response
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
HP = Hazardous Property code
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IC = X maximum inhibitory concentration
IMDG = International Maritime Dangerous Goods
LC = Lethal concentration
LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans
LD = Lethal dose
LOAEC = Lowest Observed Adverse Effect Concentration
LOAEL = Lowest Observed Adverse Effect Level
LOEC = Lowest Observed Effect Concentration
LogKow = logarithm of the n-octanol/water coefficient
LL = Lethal Loading
M = For multiplication factor
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOAEC = No Observed Adverse Effect Concentration
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOELR = No Observable Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable.
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: BE-en

SAFETY DATA SHEET

Live-or-Dye NucFix™ Red Dye

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Live-or-Dye NucFix™ Red Dye

Other names / Synonyms

32010A: Live-or-Dye NucFix™ Red Dye, 1 vial (trial size) or 4 vials

Product no.

32010A

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 and industrial use.

Use descriptors (REACH)

Sectors of use	**Description**
SU 24	Scientific research and development
Product category	**Description**
PC 21	Laboratory Chemicals
Process category	**Description**
PROC 15	Use as laboratory reagent

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

Revision

22/09/2026

SDS Version

1.0

1.4. Emergency telephone number

Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day)
See also section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP).

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Not applicable.

Precautionary statement(s)

General

Not applicable.

Prevention

Not applicable.

Response

Not applicable.

Storage

Not applicable.

Disposal

Not applicable.

Hazardous substances

Contains no substances that need to be listed on the label.

Additional labelling

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Contains no components subject to disclosure requirements.

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

Other information

-

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet. The doctor can contact the Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day)
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

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

Skin contact

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

Eye contact

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

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.
In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

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: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

No specific requirements.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Contaminated areas may be slippery.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Limit spillage, sweep up and shovel into appropriate containers for disposal. Store in suitable, closed containers for disposal.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage material

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

Storage conditions

Freezer -10°C to -35°C.
Keep container tightly closed in a dry and well-ventilated place.
Desiccate.
Protect from light.

Incompatible materials

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

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the Belgium list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations

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

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

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

Appropriate technical measures

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

Hygiene measures

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

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards	
Not required; except in case of aerosol formation.			N/A	

Skin protection

No specific requirements.

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface)				

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.			

Eye protection

Type	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
Solid

Colour
Red

Odour / Odour threshold
No data available.

pH
No data available.

Density (g/cm^3)
No data available.

Kinematic viscosity
Does not apply to solids.

Particle characteristics
No data available.

Phase changes

Melting point/Freezing point (°C)
No data available.

Softening point/range (°C)
Does not apply to solids.

Boiling point (°C)
Does not apply to solids.

Vapour pressure
No data available.

Relative vapour density
Does not apply to solids.

Decomposition temperature (°C)
No data available.

Data on fire and explosion hazards

Flash point (°C)

Does not apply to solids.

Flammability (°C)

No data available.

Auto-ignition temperature (°C)

No data available.

Lower and upper explosion limit (% v/v)

Does not apply to solids.

Solubility

Solubility in water

Soluble in DMSO or DMF

n-octanol/water coefficient (LogKow)

No data available.

Solubility in fat (g/L)

No data available.

9.2. Other information

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

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

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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 sensitization

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.

Symptoms related to the physical, chemical and toxicological characteristics
None known.

11.2. Information on other hazards
Endocrine disrupting properties
This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

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. Endocrine disrupting properties
This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product is not covered by regulations on dangerous waste.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code
Not applicable.

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 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR/ADN/RID	-	-	-	-	-	-
IMDG	-	-	-	-	-	-

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

* Packing group
** Environmental hazards
*** UN number or ID number

Additional information

Not dangerous goods according to ADR/ADN/RID, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime 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

Restrictions for application

Restricted to professional users.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

Sources

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

The full text of identified uses as mentioned in section 1

SU 24 = Scientific research and development
PROC 15 = Use as laboratory reagent
PC 21 = Laboratory Chemicals

Abbreviations and acronyms

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
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EC = Effective concentration
ED = Effective dose
EINECS = European Inventory of Existing Commercial chemical Substances

EL = Effective Loading
ErC = Concentration associated with x% growth rate response
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
HP = Hazardous Property code
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IC = X maximum inhibitory concentration
IMDG = International Maritime Dangerous Goods
LC = Lethal concentration
LCLo = Value is the lowest concentration of a material in air reported to have caused the death of animals or humans
LD = Lethal dose
LOAEC = Lowest Observed Adverse Effect Concentration
LOAEL = Lowest Observed Adverse Effect Level
LOEC = Lowest Observed Effect Concentration
LogKow = logarithm of the n-octanol/water coefficient
LL = Lethal Loading
M = For multiplication factor
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOAEC = No Observed Adverse Effect Concentration
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
NOELR = No Observable Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVCB = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable.

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: BE-en

SAFETY DATA SHEET

Anhydrous DMSO

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

Anhydrous DMSO

Other names / Synonyms

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

Product no.

90082 , 99938, 99953, 99953-1

Other means of identification

EC No.: 200-664-3
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.

Use descriptors (REACH)

Sectors of use	**Description**
SU 24	Scientific research and development
Product category	**Description**
PC 21	Laboratory Chemicals
Process category	**Description**
PROC 15	Use as laboratory reagent

Uses advised against

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

1.3. Details of the supplier of the safety data sheet

Company and address

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

E-mail

techsupport@biotium.com

Revision

29/05/2025

SDS Version

3.0

Date of previous version

01/02/2025 (2.0)

1.4. Emergency telephone number

Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day)
See also section 4 “First aid measures”.

SECTION 2: Hazards identification

2.1. ▼Classification of the substance or mixture
Not classified according to Regulation (EC) No. 1272/2008 (CLP).

2.2. Label elements
▼Hazard pictogram(s)
Not applicable.

▼Signal word
Not applicable.

▼Hazard statement(s)
Not applicable.

Precautionary statement(s)

General
-

▼Prevention
-

▼Response
-

▼Storage
-

▼Disposal
-

▼Hazardous substances
Does not contain any substances required to report

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. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. ▼Substances

Product/substance	Identifiers	% w/w	Classification	Note
Dimethyl sulfoxide	CAS No.: 67-68-5 EC No.: 200-664-3 REACH: Index No.:	95-100%		

3.2. Mixtures
Not applicable. This product is a substance.

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

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

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
In the case of accident: Contact a doctor or casualty department – bring the label or this safety data sheet. The doctor can contact the Anti-poison center: +32 (0) 70 245 245 (every day, 24 hours a day)

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: Firefighting 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 static electricity.

Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.
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

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

Storage conditions

Keep container tightly closed in a dry and well-ventilated place.
Desiccate.
Room temperature or below. For Biotium products where the label indicates room temperature or RT, this implies storage in ambient conditions between 20°C and 30°C.

Incompatible materials

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

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the Belgium list of substances with an occupational exposure limit.

DNEL

Dimethyl sulfoxide

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	178 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	356 mg/kg bw/day
Long term – Local effects - General population	Inhalation	3.13 mg/m³
Long term – Local effects - Workers	Inhalation	17.67 mg/m³
Long term – Systemic effects - General population	Inhalation	56 mg/m³
Long term – Systemic effects - Workers	Inhalation	75 mg/m³
Long term – Systemic effects - General population	Oral	1.67 mg/kg bw/day

PNEC

Dimethyl sulfoxide

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		17 mg/L
Freshwater sediment		61.4 mg/kg
Marine water		1.7 mg/L
Marine water sediment		6.14 mg/kg
Predators		700 mg/kg
Sewage treatment plant		11 mg/L
Soil		2.32 mg/kg

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 CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
Not required; except in case of aerosol formation.			N/A



▼Skin protection

Recommended	Type/Category	Standards
No specific requirements.	-	-

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.			



Eye protection

Type	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

Colour

Clear

Odour / Odour threshold

Mild

▼pH

No data available.

▼Density (g/cm^3)

No data available.

▼Kinematic viscosity

No data available.

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

16-19

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

189

▼Vapour pressure

No data available.

Relative vapour density

1.1 g/mL

▼Decomposition temperature (°C)

No data available.

Data on fire and explosion hazards

Flash point (°C)

0

▼Flammability (°C)

No data available.

Auto-ignition temperature (°C)

300 - 302

▼Lower and upper explosion limit (% v/v)

No data available.

Solubility

▼Solubility in water

No data available.

n-octanol/water coefficient (LogKow)

0

▼Solubility in fat (g/L)

No data available.

9.2. Other information

Decomposition temperature (Self-reactive substances and mixtures) (°C)

> 190

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

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

10.6. ▼Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

▼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
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.

11.2. Information on other hazards

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.

▼Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

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. ▼Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. 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

13.1. ▼Waste treatment methods

Product is not covered by regulations on dangerous waste.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

Not applicable.

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

* Packing group

** Environmental hazards

▼Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime 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

▼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.

Demands for specific education

No specific requirements.

▼SEVESO - Categories / dangerous substances

Not applicable.

Additional information

Not applicable.

▼Sources

Labor Law of 24-01-1985, updated 31-12-2020.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

The full text of identified uses as mentioned in section 1

SU 24 = Scientific research and development
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Abbreviations and acronyms

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GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
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)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
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SCL = A specific concentration limit
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STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
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 Article 31 of REACH, 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 as required under Article 32 of REACH.
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

Eric Torres

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: BE-en