

#### SAFETY DATA SHEET

# GloMelt™ Thermal Shift Protein Stability Kit 2.0 (with ROX)

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

#### 1.1. Product identifier

#### Trade name

GloMelt™ Thermal Shift Protein Stability Kit 2.0 (with ROX)

#### Other names / Synonyms

33028-T: GloMelt<sup>™</sup> Thermal Shift Protein Stability Kit 2.0 (with ROX), 200 x 20 uL reactions 33028-1: GloMelt<sup>™</sup> Thermal Shift Protein Stability Kit 2.0 (with ROX), 2000 x 20 uL reactions

#### Kit Components:

99843-20UL: GloMelt™ Dye, 200X, 20 uL 99843-200UL: GloMelt™ Dye, 200X, 200 uL

99891-40UL: Recombinant Mouse Monoclonal IgG1, 5 mg/mL, 40 uL

99845-100UL: ROX Reference Dye, 40 uM, 100 uL 99845-1mL: ROX Reference Dye, 40 uM, 1 mL

#### Product no.

33028-T, 33028-1

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

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

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

#### Uses advised against

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

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

## Company and address

#### Biotium, Inc.

46117 Landing Parkway CA 94538 Fremont

USA

T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com

#### E-mail

techsupport@biotium.com

#### SDS date

12/13/2024

## SDS Version

1.0

## 1.4. Emergency telephone number

In an emergency call 911

Alberta / Northwestern Territories (PADIS): 1-800-332-1414

British Columbia (DPIC): 1-800-567-8911 Manitoba: 1-855-7POISON (1-855-776-4766)

New Brunswick: 911

Nova Scotia / Prince Edward Island (IWK): 1-800-565-8161

Ontario (OPC): 1-800-268-9017 Québec (CAPQ): 1-800-463-5060 Saskatchewan (PADIS): 1-866-454-1212 Yukon Territory: (867) 393-8700

Transport emergenices: Call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or \*666 on a cellular phone (24

hours)

See also section 4 "First aid measures".



#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

See individual kit component SDS attached.

Not classified according to WHMIS 2022

#### 2.2. Label elements

See individual kit component SDS attached.

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Precautionary statement(s)

General

\_

Prevention

-

Response

-

Storage

-

Disposal

.

#### Hazardous substances

None known.

Additional labelling

Not applicable.

## 2.3. Other hazards

See individual kit component SDS attached.

## SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Does not contain any substances required to report

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

#### Other information

See individual kit component SDS attached.

## **SECTION 4: First-aid measures**

## 4.1. Description of first aid measures

## General information

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

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

## Inhalation

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

## Skin contact

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

#### Eye contact

Rinse gently with lukewarm water. Remove any contact lenses if this is easy to do. Continue rinsing. In case of



persistent eye irritation or discomfort: Seek medical help.

#### Ingestion

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

#### Burns

Not applicable.

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

None known.

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

Treat symptomatically.

#### Information to medics

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

## **SECTION 5: Fire-fighting measures**

## 5.1. Extinguishing media

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

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

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

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

#### 5.3. Advice for firefighters

No specific requirements.

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

## 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

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

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

#### 6.4. Reference to other sections

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

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

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

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

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

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

#### Recommended storage material

No specific requirements

#### Storage conditions

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

## Incompatible materials

No specific requirements

## 7.3. Specific end use(s)

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

## SECTION 8: Exposure controls/personal protection



#### 8.1. Control parameters

No substances are listed in any provincial list of substances with an occupational exposure limit.

#### 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

## 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**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

## Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

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	
Not required; case of aeroso 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

re protection <b>Type</b>	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

No data available

Odour threshold (ppm)

No data available

рН

No data available

Density (g/cm<sup>3</sup>)

No data available

Relative density

No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

Phase changes

Melting point (°C)

No data available

Softening point/range (°F)

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

Explosion limits (% v/v)

No data available

Solubility

Solubility in water

Soluble

n-octanol/water coefficient (LogKow)

No data available

Solubility in fat (g/L)

No data available

9.2. Other information

Evaporation rate (n-butylacetate = 100)

No data available

Other physical and chemical parameters

No data available.

Oxidizing properties

No data available



## 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 toxicological effects

#### Acute toxicity

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

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory sensitisation

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

## Skin sensitisation

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

## Germ cell mutagenicity

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

## Carcinogenicity

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

#### Reproductive toxicity

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

## STOT-single exposure

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

## STOT-repeated exposure

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

## Aspiration hazard

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

## Long term effects

None known.

## Other information

None known.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No data available.

#### 12.2. Persistence and degradability

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

## 12.3. Bioaccumulative potential

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

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment



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

#### 12.6. Other adverse effects

None known.

#### **SECTION 13: Disposal considerations**

#### Waste treatment methods

None of the components are listed

Specific labelling

Contaminated packing

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

## **SECTION 14: Transport information**

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

<sup>\*</sup> Packing group

#### Additional information

Not dangerous goods according to TDG, 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. Canadian lists

**NDSL** 

None of the components are listed

DSL

None of the components are listed

#### 15.4. Restrictions for application

Restricted to professional users.

## 15.5. Demands for specific education

No specific requirements.

Additional information

Not applicable.

15.7. Chemical safety assessment

No

Sources

Hazardous Products Regulations (SOR/2022-272)

#### **SECTION 16: Other information**

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

None known.

Abbreviations and acronyms

ANSI = American National Standards Institute

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



ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health 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)

NDSL = Non-domestic substances list

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PHNOC = Physical Hazards Not Otherwise Classified

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

SCL = A specific concentration limit.

SOR = Statutory Orders and Regulations

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TDG = Transportation of Dangerous Goods

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

WHIMS = Workplace Hazardous Materials Information System

#### Additional information

A safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

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

## The safety data sheet is validated by

Julianne Davis

## Other

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

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

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

Country-language: CA-en



#### SAFETY DATA SHEET

## GloMelt™ Dye, 200X

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

#### 1.1. Product identifier

#### Trade name

GloMelt™ Dye, 200X

## Other names / Synonyms

99843-20UL: GloMelt™ Dye, 200X, 20 uL 99843-200UL: GloMelt™ Dye, 200X, 200 uL

99843-20UL, 99843-200UL

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

### Relevant identified uses of the substance or mixture

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

## Uses advised against

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

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

## Company and address

#### Biotium, Inc.

46117 Landing Parkway CA 94538 Fremont USA

T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com

## E-mail

techsupport@biotium.com

## SDS date

12/13/2024

## **SDS Version**

1.0

## 1.4. Emergency telephone number

In an emergency call 911

Alberta / Northwestern Territories (PADIS): 1-800-332-1414

British Columbia (DPIC): 1-800-567-8911 Manitoba: 1-855-7POISON (1-855-776-4766)

New Brunswick: 911

Nova Scotia / Prince Edward Island (IWK): 1-800-565-8161

Ontario (OPC): 1-800-268-9017 Québec (CAPQ): 1-800-463-5060 Saskatchewan (PADIS): 1-866-454-1212 Yukon Territory: (867) 393-8700

Transport emergenices: Call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or \*666 on a cellular phone (24

hours)

See also section 4 "First aid measures".

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

Not classified according to WHMIS 2022

#### 2.2. Label elements



#### Hazard pictogram(s)

Not applicable.

## Signal word

Not applicable.

Hazard statement(s)

Precautionary statement(s)

General

-

Prevention

-

Response

-

Storage

-

Disposal

-

## Hazardous substances

Dimethyl sulfoxide

Additional labelling

Not applicable.

2.3. Other hazards

## SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Does not contain any substances required to report

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

#### Other information

-

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

## SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

## General information

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

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

## Inhalation

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

## Skin contact

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

#### Eye contact

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

#### Ingestion

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

#### Burns

Not applicable.

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

None known.

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



Treat symptomatically.

#### Information to medics

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

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Extinguishing media

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

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

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

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

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

Ensure adequate ventilation, especially in confined areas.

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

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.

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 any provincial list of substances with an occupational exposure limit.



#### 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

#### 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**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

## Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

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	
Not required; escase 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		(11111.)		
after use in accordance with applicable laws and good laboratory practices. Wash and	<u> </u>			

## Eye protection

dry hands.

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



Type Standards

EN 166(EU).

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Yellow

Odour

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

#### Odour threshold (ppm)

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

рΗ

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

Density (g/cm³)

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

Kinematic viscosity

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

Particle characteristics

Does not apply to liquids.

#### Phase changes

Melting point (°C)

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

Softening point/range (°F)

Does not apply to liquids.

Boiling point (°C)

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

Vapour pressure

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

Relative vapour density

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

Decomposition temperature (°C)

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

#### Data on fire and explosion hazards

Flash point (°C)

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

Flammability (°C)

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

Auto-ignition temperature (°C)

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

Explosion limits (% v/v)

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

Solubility

Solubility in water

Soluble in water

n-octanol/water coefficient (LogKow)

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

Solubility in fat (g/L)

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

## 9.2. Other information

Other physical and chemical parameters

No data available.

Oxidizing properties

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



## SECTION 10: Stability and reactivity

#### 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 toxicological effects

#### Acute toxicity

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

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

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

#### Respiratory sensitisation

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

## Skin sensitisation

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

## Germ cell mutagenicity

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

## Carcinogenicity

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

## Reproductive toxicity

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

## STOT-single exposure

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

## STOT-repeated exposure

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

## Aspiration hazard

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

## Long term effects

None known.

## Other information

None known.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No data available.

#### 12.2. Persistence and degradability

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

## 12.3. Bioaccumulative potential

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

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment



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

#### 12.6. Other adverse effects

None known.

## **SECTION 13: Disposal considerations**

#### Waste treatment methods

None of the components are listed

Specific labelling

Contaminated packing

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

## **SECTION 14: Transport information**

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

<sup>\*</sup> Packing group

#### Additional information

Not dangerous goods according to TDG, 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. Canadian lists

**NDSL** 

None of the components are listed

DSL

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.

## Additional information

Not applicable.

## 15.7. Chemical safety assessment

No

## Sources

Hazardous Products Regulations (SOR/2022-272)

## **SECTION 16: Other information**

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

None known.

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



#### Abbreviations and acronyms

ANSI = American National Standards Institute

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health 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)

NDSL = Non-domestic substances list

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PHNOC = Physical Hazards Not Otherwise Classified

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

SCL = A specific concentration limit.

SOR = Statutory Orders and Regulations

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TDG = Transportation of Dangerous Goods

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

WHIMS = Workplace Hazardous Materials Information System

#### Additional information

A safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

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

#### The safety data sheet is validated by

Julianne Davis

#### Other

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

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

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

Country-language: CA-en



#### SAFETY DATA SHEET

# Recombinant Mouse Monoclonal IgG1, 5 mg/mL

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

#### 1.1. Product identifier

## Trade name

Recombinant Mouse Monoclonal IgG1, 5 mg/mL

#### Other names / Synonyms

99891-40UL: Recombinant Mouse Monoclonal IgG1, 5 mg/mL, 40 uL

## Product no.

99891-40UL

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

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

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

#### Uses advised against

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

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

#### Company and address

## Biotium, Inc.

46117 Landing Parkway CA 94538 Fremont

USA

T: +1 510-265-1027 Fax: +1 510-265-1352

http://www.biotium.com

#### E-mai

techsupport@biotium.com

#### SDS date

12/13/2024

#### **SDS Version**

1.0

#### 1.4. Emergency telephone number

In an emergency call 911

Alberta / Northwestern Territories (PADIS): 1-800-332-1414

British Columbia (DPIC): 1-800-567-8911 Manitoba: 1-855-7POISON (1-855-776-4766)

New Brunswick: 911

Nova Scotia / Prince Edward Island (IWK): 1-800-565-8161

Ontario (OPC): 1-800-268-9017 Québec (CAPQ): 1-800-463-5060 Saskatchewan (PADIS): 1-866-454-1212 Yukon Territory: (867) 393-8700

Transport emergenices: Call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or \*666 on a cellular phone (24

hours)

See also section 4 "First aid measures".

#### SECTION 2: Hazard(s) identification

## 2.1. Classification of the substance or mixture

Not classified according to WHMIS 2022

## 2.2. Label elements

Hazard pictogram(s)



Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Precautionary statement(s)

General

-

Prevention

Response

\_

Storage

\_

Disposal

Hazardous substances

None known.

Additional labelling

Not applicable.

2.3. Other hazards

## SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Does not contain any substances required to report

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

#### Other information

\_

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

## SECTION 4: First-aid measures

## 4.1. Description of first aid measures

## General information

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

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

#### Inhalation

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

## Skin contact

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

## Eye contact

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

#### Ingestion

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

#### **Burns**

Not applicable.

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

None known.

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

Treat symptomatically.



#### Information to medics

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

#### **SECTION 5: Fire-fighting measures**

## 5.1. Extinguishing media

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

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

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

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

#### 5.3. Advice for firefighters

No specific requirements.

#### SECTION 6: Accidental release measures

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

Ensure adequate ventilation, especially in confined areas.

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

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.

#### 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 any provincial list of substances with an occupational exposure limit.

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

## 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** 



Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

## Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

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	
Not required; excep case of aerosol formation.	t in		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

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

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Clear



#### Odour

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

#### Odour threshold (ppm)

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

рΗ

7.5

#### Density (g/cm<sup>3</sup>)

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

#### Kinematic viscosity

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

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

#### Melting point (°C)

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

#### Softening point/range (°F)

Does not apply to liquids.

## Boiling point (°C)

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

### Vapour pressure

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

#### Relative vapour density

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

## Decomposition temperature (°C)

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

## Data on fire and explosion hazards

#### Flash point (°C)

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

#### Flammability (°C)

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

#### Auto-ignition temperature (°C)

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

#### Explosion limits (% v/v)

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

#### Solubility

## Solubility in water

Soluble in water

## n-octanol/water coefficient (LogKow)

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

#### Solubility in fat (q/L)

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

#### 9.2. Other information

## Other physical and chemical parameters

No data available.

#### Oxidizing properties

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

### SECTION 10: Stability and reactivity

#### 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 toxicological effects

#### Acute toxicity

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

#### Skin corrosion/irritation

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

## Serious eye damage/irritation

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

## Respiratory sensitisation

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

#### Skin sensitisation

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

#### Germ cell mutagenicity

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

#### Carcinogenicity

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

#### Reproductive toxicity

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

## STOT-single exposure

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

#### STOT-repeated exposure

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

#### Aspiration hazard

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

#### Long term effects

None known.

#### Other information

None known.

### **SECTION 12: Ecological information**

## 12.1. Toxicity

No data available.

## 12.2. Persistence and degradability

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

#### 12.3. Bioaccumulative potential

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

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

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

#### 12.6. Other adverse effects

None known.

## SECTION 13: Disposal considerations

#### Waste treatment methods

None of the components are listed

## Specific labelling

#### Contaminated packing

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



## **SECTION 14: Transport information**

	14.1 14.2 UN / ID UN proper shipping name	14.3 Hazard class(es)	.5 Other nv** informatio n:
TDG		-	 -
IMDG	-	-	 -
IATA		-	 -

<sup>\*</sup> Packing group

Additional information

Not dangerous goods according to TDG, 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. Canadian lists

**NDSL** 

None of the components are listed

DSI

None of the components are listed

15.4. Restrictions for application

Restricted to professional users.

15.5. Demands for specific education

No specific requirements.

Additional information

Not applicable.

15.7. Chemical safety assessment

No

Sources

Hazardous Products Regulations (SOR/2022-272)

## SECTION 16: Other information

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

None known.

## Abbreviations and acronyms

ANSI = American National Standards Institute

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health 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)

NDSL = Non-domestic substances list

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



OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PHNOC = Physical Hazards Not Otherwise Classified

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

SCL = A specific concentration limit.

SOR = Statutory Orders and Regulations

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TDG = Transportation of Dangerous Goods

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

WHIMS = Workplace Hazardous Materials Information System

#### Additional information

A safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

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

## The safety data sheet is validated by

Julianne Davis

#### Other

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

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

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

Country-language: CA-en



#### SAFETY DATA SHEET

## ROX Reference Dye, 40 uM

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

#### 1.1. Product identifier

#### Trade name

ROX Reference Dye, 40 uM

#### Other names / Synonyms

99845-100uL: ROX Reference Dye, 40 uM, 100 uL 99845-1mL: ROX Reference Dye, 40 uM, 1 mL

#### Product no.

99845-100uL, 99845-1mL

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

### Relevant identified uses of the substance or mixture

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

## Uses advised against

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

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

## Company and address

#### Biotium, Inc.

46117 Landing Parkway CA 94538 Fremont

USA

T: +1 510-265-1027 Fax: +1 510-265-1352

http://www.biotium.com

## E-mail

techsupport@biotium.com

## SDS date

12/13/2024

## **SDS Version**

1.0

## 1.4. Emergency telephone number

In an emergency call 911

Alberta / Northwestern Territories (PADIS): 1-800-332-1414

British Columbia (DPIC): 1-800-567-8911 Manitoba: 1-855-7POISON (1-855-776-4766)

New Brunswick: 911

Nova Scotia / Prince Edward Island (IWK): 1-800-565-8161

Ontario (OPC): 1-800-268-9017 Québec (CAPQ): 1-800-463-5060 Saskatchewan (PADIS): 1-866-454-1212 Yukon Territory: (867) 393-8700

Transport emergenices: Call CANUTEC at 1-888-CAN-UTEC (226-8832), 613-996-6666 or \*666 on a cellular phone (24

hours)

See also section 4 "First aid measures".

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

Not classified according to WHMIS 2022

#### 2.2. Label elements



#### Hazard pictogram(s)

Not applicable.

## Signal word

Not applicable.

Hazard statement(s)

Precautionary statement(s)

General

\_

Prevention

-

Response

-

Storage

-

Disposal

-

## Hazardous substances

None known.

Additional labelling

Not applicable.

2.3. Other hazards

#### SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Not applicable. This product is a mixture.

#### 3.2. Mixtures

Does not contain any substances required to report

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

#### Other information

-

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

## **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

## General information

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

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

## Inhalation

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

## Skin contact

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

#### Eye contact

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

#### Ingestion

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

#### Burns

Not applicable.

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

None known.

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



Treat symptomatically.

#### Information to medics

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

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Extinguishing media

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

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

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

## 5.3. Advice for firefighters

No specific requirements.

#### SECTION 6: Accidental release measures

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

Ensure adequate ventilation, especially in confined areas.

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

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

## Storage conditions

Freezer -10°C to -35°C.

Protect from light.

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

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing 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 any provincial list of substances with an occupational exposure limit.

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

## 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**

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

## Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

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	
Not required; except in case of aerosol formation.	1		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

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

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state

Liquid



#### Colour

Pink

#### Odour

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

#### Odour threshold (ppm)

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

#### рΗ

8.5

#### Density (g/cm<sup>3</sup>)

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

#### Kinematic viscosity

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

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

## Melting point (°C)

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

## Softening point/range (°F)

Does not apply to liquids.

#### Boiling point (°C)

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

#### Vapour pressure

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

## Relative vapour density

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

#### Decomposition temperature (°C)

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

#### Data on fire and explosion hazards

#### Flash point (°C)

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

#### Flammability (°C)

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

## Auto-ignition temperature (°C)

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

#### Explosion limits (% v/v)

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

#### Solubility

## Solubility in water

Soluble in water

#### n-octanol/water coefficient (LogKow)

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

#### Solubility in fat (q/L)

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

## 9.2. Other information

## Other physical and chemical parameters

No data available.

## Oxidizing properties

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

#### SECTION 10: Stability and reactivity

#### 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 toxicological effects

#### Acute toxicity

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

#### Skin corrosion/irritation

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

## Serious eye damage/irritation

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

## Respiratory sensitisation

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

#### Skin sensitisation

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

#### Germ cell mutagenicity

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

#### Carcinogenicity

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

#### Reproductive toxicity

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

#### STOT-single exposure

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

#### STOT-repeated exposure

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

## Aspiration hazard

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

#### Long term effects

None known.

#### Other information

None known.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

No data available.

#### 12.2. Persistence and degradability

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

#### 12.3. Bioaccumulative potential

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

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

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

## 12.6. Other adverse effects

None known.

#### SECTION 13: Disposal considerations

#### Waste treatment methods

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

<sup>\*</sup> Packing group

#### Additional information

Not dangerous goods according to TDG, 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. Canadian lists

**NDSL** 

None of the components are listed

DSI

None of the components are listed

15.4. Restrictions for application

Restricted to professional users.

15.5. Demands for specific education

No specific requirements.

Additional information

Not applicable.

15.7. Chemical safety assessment

No

Sources

Hazardous Products Regulations (SOR/2022-272)

#### **SECTION 16: Other information**

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

None known.

#### Abbreviations and acronyms

ANSI = American National Standards Institute

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

DSL = Domestic Substances List

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HHNOC = Health 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)

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



NDSL = Non-domestic substances list

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PHNOC = Physical Hazards Not Otherwise Classified

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

SCL = A specific concentration limit.

SOR = Statutory Orders and Regulations

STEL = Short-term exposure limits

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TDG = Transportation of Dangerous Goods

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

WHIMS = Workplace Hazardous Materials Information System

#### Additional information

A safety data sheet is not required for this product. This safety data sheet has been created on a voluntary basis to distribute relevant information.

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

## The safety data sheet is validated by

Julianne Davis

#### Other

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

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

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

Country-language: CA-en