

SAFETY DATA SHEET

# **Resazurin Solution**

## **SECTION 1: Identification**

1.1. Product identifier Trade name **Resazurin Solution** Other names / Synonyms 30025-1, 25 mL (2,500 assays) 30025-2, 100 mL (10,000 assays) Product no. 30025-1, 30025-2 1.2. Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use. Restricted to professional users. Uses advised against None known. 1.3. Details of the supplier of the safety data sheet Company and address **Biotium**, Inc. 46117 Landing Parkway CA 94538 Fremont USA T: +1 510-265-1027 Fax: +1 510-265-1352 http://www.biotium.com E-mail techsupport@biotium.com SDS date 2024-02-23 SDS Version 1.0 Date of previous version 2024-02-23 (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

#### Additional warnings

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

SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Does not contain any substances required to report

#### 3.2. Mixtures

Not applicable. This product is a substance.

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

## Other information

SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

#### **General information**

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

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

## Inhalation

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

## Skin contact

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

#### Eye contact

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

#### Ingestion

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

#### **Burns**

Not applicable.



- 4.2. Most important symptoms and effects, both acute and delayed None known.
- 4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

## Information to medics

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

#### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

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

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

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

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact a poison centre in order to obtain further advice. See section 1 "Emergency telephone number". Fire fighters should wear appropriate personal protective equipment.

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 temperature

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

#### Refrigerator 2°C to 8°C

### 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
No specific requirements			

## Skin protection

No specific requirements.

## Hand protection

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

## Eye protection

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

### SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties





Physical state Liquid Colour No data available Odour No data available Odour threshold (ppm) No data available pН pH in solution 7.4 (%) Density (g/cm<sup>3</sup>) No data available **Relative density** No data available Kinematic viscosity No data available Phase changes Melting point (°C) No data available Boiling point (°C) No data available Vapour pressure No data available Relative vapour density No data available Decomposition temperature (°C) No data available Evaporation rate (n-butylacetate = 100) 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 in water n-octanol/water coefficient (LogKow) No data available Solubility in fat (g/L) No data available 9.2. Other information Evaporation rate (n-butylacetate = 100) No data available Other physical and chemical parameters No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity No data available.10.2. Chemical stability



<ul> <li>The product is stable under the conditions, noted in section 7 "Handling and storage".</li> <li>10.3. Possibility of hazardous reactions None known.</li> <li>10.4. Conditions to avoid Heat, flames and sparks.</li> <li>10.5. Incompatible materials No specific requirements</li> <li>10.6. Hazardous decomposition products The product is not degraded when used as specified in section 1.</li> </ul>
SECTION 11: Toxicological information
<ul> <li>11.1. Information on toxicological effects</li> <li>Acute toxicity</li> <li>Based on available data, the classification criteria are not met.</li> <li>Skin corrosion/irritation</li> <li>Based on available data, the classification criteria are not met.</li> <li>Serious eye damage/irritation</li> <li>Based on available data, the classification criteria are not met.</li> <li>Respiratory sensitisation</li> <li>Based on available data, the classification criteria are not met.</li> <li>Skin sensitisation</li> <li>Based on available data, the classification criteria are not met.</li> <li>Skin sensitisation</li> <li>Based on available data, the classification criteria are not met.</li> <li>Germ cell mutagenicity</li> <li>Based on available data, the classification criteria are not met.</li> <li>Carcinogenicity</li> <li>Based on available data, the classification criteria are not met.</li> <li>Carcinogenicity</li> <li>Based on available data, the classification criteria are not met.</li> <li>STOT-single exposure</li> <li>Based on available data, the classification criteria are not met.</li> <li>STOT-repeated exposure</li> <li>Based on available data, the classification criteria are not met.</li> <li>Aspiration hazard</li> <li>Based on available data, the classification criteria are not met.</li> <li>Long term effects</li> <li>None known.</li> </ul>
SECTION 12: Ecological information
12.1 Tovicity

## 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 / 1	14.2 ID UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
TDG	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-
+ De alsta						

## \* Packing group

## \*\* Environmental hazards

## 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

#### DSL / NDSL

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

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

Eric Torres

## Other

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