

# SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008  
(All references to EU regulations and directives are abbreviated into only the numeric term)  
Revision date 2026-09-04  
Replaces SDS issued 2023-09-27  
Version number 5.0



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

### 1.1. Product identifier

|                |                                     |
|----------------|-------------------------------------|
| Trade name     | Blue Free Protein S Reaction Buffer |
| Article number | C3029, C3068                        |

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

|                 |                      |
|-----------------|----------------------|
| Identified uses | Laboratory chemicals |
|-----------------|----------------------|

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

|           |                                                               |
|-----------|---------------------------------------------------------------|
| Company   | Nordic Biomarker<br>Vildmannavägen 1<br>903 47 Umeå<br>Sweden |
| Telephone | +46 90718601                                                  |
| E-mail    | info@nordicbiomarker.com                                      |

### 1.4. Emergency telephone number

Phone number for emergencies: 999 or 112. The numbers are available 24/7.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Upon assessment, this mixture is not classified as hazardous according to 1272/2008

### 2.2. Label elements

|                         |                |
|-------------------------|----------------|
| Hazard pictogram        | Not applicable |
| Signal word             | Not applicable |
| Hazard statement        | Not applicable |
| Precautionary statement | Not applicable |

### Supplemental hazard information

EUH210 Safety data sheet available on request.

EUH208 Contains 2-METHYLISOTHIAZOL-3(2H)-ONE. May produce an allergic reaction.

### 2.3. Other hazards

The product does not contain any substances  $\geq 0,1\%$  that are assessed to be a PBT or a vPvB in accordance with Annex XIII of REACH (EC) No 1907/2006.

The product does not contain any substances  $\geq 0,1\%$  identified as having endocrine disruptive properties in accordance with Article 59(1) of REACH (EC) No 1907/2006 and in accordance with the criteria set out in (EU) 2017/2100 or (EU) 2018/605.

The product contains substance(s) of biological origin which may contain pathogens.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

| Constituent                                                                                | Classification                                                                                                                                                                                                                                                                                                    | Concentration |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>2-METHYLISOTHIAZOL-3(2H)-ONE</b>                                                        |                                                                                                                                                                                                                                                                                                                   |               |
| CAS No: 2682-20-4<br>EC No: 220-239-6<br>Index No: 613-326-00-9<br>REACH: 01-2120764690-50 | Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Skin. Sens. 1A, Aquatic Acute 1, M = 10, Aquatic Chronic 1, M = 1; H330, H311, H301, H314, EUH071, H318, H317, H400, H410<br><i>Specific concentration limits and acute toxicity estimates (ATE):<br/>Skin. Sens. 1A, H317: C ≥ 0,0015 %</i> | <0.0015 %     |

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Generally

In case of concern, or if symptoms occur, call a doctor/physician.

#### Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

#### Upon eye contact

Remove contact lenses immediately if possible.

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor/ophthalmologist.

#### Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

#### Upon ingestion

Rinse nose, mouth and throat with water.

If symptoms persist contact a doctor.

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

#### Upon skin contact

Allergic reactions can occur in sensitized individuals.

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

Symptomatic treatment.

Upon contact with a doctor, make sure to have the label or this safety data sheet with you.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

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

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

### 5.3. Advice for firefighters

Protective measures to be taken with regard to other materials at the scene of the fire.

In case of fire use proper breathing apparatus.

Wear full protective clothing.

## SECTION 6: Accidental release measures

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

Keep unauthorized and unprotected people at a safe distance.  
Avoid inhalation and exposure to skin and eyes.  
Note that there is a risk of slipping if product is leaking/spilling.  
Ensure good ventilation.  
Use recommended safety equipment, see section 8.

### 6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

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

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

### 6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Take the necessary preventive and protective measures for safe handling.  
Avoid inhalation and contact with skin and eyes.  
Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.  
Do not eat, drink or smoke in premises where this product is handled.  
Wash your hands after using the product.  
Remove contaminated clothes.  
Wash contaminated clothing before reuse.  
Use recommended safety equipment, see section 8.  
Implement appropriate engineering controls if necessary, see Section 8.

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

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in the environment.  
Take the necessary preventive and protective measures for safe storage.  
Store tightly, in original packaging.  
Always use sealed and visibly labeled packages.  
Store in dry and cool area.

### 7.3. Specific end use(s)

See identified uses in Section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. National limit values

##### **SODIUM HYDROXIDE**

United Kingdom (EH40/2005)

Short term exposure limit (STEL) 2 mg/m<sup>3</sup>

##### **SODIUM AZIDE**

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 0.1 mg/m<sup>3</sup>

Short term exposure limit (STEL) 0.3 mg/m<sup>3</sup>

Note Sk

Explanations of abbreviations are given in Section 16b

**DNEL****2-METHYLISOTHIAZOL-3(2H)-ONE**

|          | Type of exposure    | Route of exposure | Value                   |
|----------|---------------------|-------------------|-------------------------|
| Worker   | Acute<br>Local      | Inhalation        | 0.043 mg/m <sup>3</sup> |
| Worker   | Chronic<br>Local    | Inhalation        | 0.021 mg/m <sup>3</sup> |
| Consumer | Acute<br>Local      | Inhalation        | 0.043 mg/m <sup>3</sup> |
| Consumer | Acute<br>Systemic   | Oral              | 0.053 mg/kg bw          |
| Consumer | Chronic<br>Local    | Inhalation        | 0.021 mg/m <sup>3</sup> |
| Consumer | Chronic<br>Systemic | Oral              | 0.027 mg/kg bw          |

**PNEC****2-METHYLISOTHIAZOL-3(2H)-ONE**

|                                    |                 |
|------------------------------------|-----------------|
| Environmental protection target    | PNEC value      |
| Fresh water                        | 3.39 µg/L       |
| Marine water                       | 3.39 µg/L       |
| Microorganisms in sewage treatment | 230 µg/L        |
| Soil (agricultural)                | 0.0471 mg/kg dw |
| Intermittent                       | 3.39 µg/L       |

**8.2. Exposure controls**

The risks posed by the product or its constituents must be considered in the task specific risk assessment, in accordance with current working environment legislation. The risk assessment should be reviewed regularly and updated if necessary.

**8.2.1. Appropriate engineering controls**

The ventilation in the workplace must ensure an air quality that meets the requirements of the current working environment legislation. Local exhaust ventilation should be used to remove airborne contaminants at the source.

**8.2.2. Individual protection measures, such as personal protective equipment****Eye/face protection**

Use protective glasses with tight seals according to standard EN166.

**Skin protection**

Wear suitable protective clothing when necessary.

Wear protective gloves (EN 374) upon repeated or prolonged exposure.

During continuous contact use gloves with a minimum breakthrough time of at least 240 minutes, preferably over 480 minutes.

The most suitable protective glove should be chosen in consultation with the glove supplier, taking into account the risk assessment for the specific task and the properties of the chemicals involved. Note that the breakthrough time of the material is affected by the duration of the exposure, temperature conditions, abrasion, etcetera.

Based on the chemical properties of the product, the following glove materials are recommended (EN 374):.

- Nitrile rubber.

**Respiratory protection**

Use appropriate respiratory protective equipment in case of insufficient ventilation.

The most appropriate respiratory protective equipment should be decided in consultation with the appointed safety representative, taking into account the risk assessment for the specific task.

Based on the physical and chemical properties of the product, the following filter type(s) and/or filter combination(s) are recommended:.

- A/P2.

**8.2.3. Environmental exposure controls**

For limiting environmental exposure, see section 12.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                                              |                              |
|--------------------------------------------------------------|------------------------------|
| (a) Physical state                                           | liquid<br>Form: liquid       |
| (b) Colour                                                   | Transparent                  |
| (c) Odour                                                    | scentless                    |
| (d) Melting point/freezing point                             | Not indicated                |
| (e) Boiling point or initial boiling point and boiling range | Not indicated                |
| (f) Flammability                                             | Not indicated                |
| (g) Lower and upper explosion limit                          | Not indicated                |
| (h) Flash point                                              | Not indicated                |
| (i) Auto-ignition temperature                                | Not indicated                |
| (j) Decomposition temperature                                | Not indicated                |
| (k) pH                                                       | When supplied, pH is: 7 - 10 |
| (l) Kinematic viscosity                                      | Not indicated                |
| (m) Solubility                                               | Solubility in water: Soluble |
| (n) Partition coefficient n-octanol/water (log value)        | Not indicated                |
| (o) Vapour pressure                                          | Not indicated                |
| (p) Density and/or relative density                          | Not indicated                |
| (q) Relative vapour density                                  | Not indicated                |
| (r) Particle characteristics                                 | Not indicated                |

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not indicated

#### 9.2.2. Other safety characteristics

Not indicated

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

### 10.2. Chemical stability

The product is stable at normal storage and handling conditions.

### 10.3. Possibility of hazardous reactions

No hazardous reactions known during normal use.

### 10.4. Conditions to avoid

There are no known conditions to avoid.

### 10.5. Incompatible materials

There are no known incompatible materials.

### 10.6. Hazardous decomposition products

None under normal conditions.

## SECTION 11: Toxicological information

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

Information on possible health hazards are based on experience and / or toxicological properties of several components in the product.

#### Acute toxicity

The product is not classified as acutely toxic.

#### 2-METHYLISOTHIAZOL-3(2H)-ONE

LD50 rat 24h: > 2000 mg/kg Dermal

LD50 rat 24h: > 2000 mg/kg Orally

#### Skin corrosion/irritation

The product is not classified for skin corrosion/irritation.

**Serious eye damage/irritation**

The product is not classified for serious eye damage/eye irritation.

**Respiratory or skin sensitisation**

The product is not classified as sensitising.

May cause an allergic reaction in sensitised people.

**Germ cell mutagenicity**

The product is not classified as mutagen.

**Carcinogenicity**

The product is not classified as carcinogenic.

**Reproductive toxicity**

The product is not classified as a reproductive toxicant.

**STOT-single exposure**

The product is not classified for specific organ toxicity after single exposure.

**STOT-repeated exposure**

The product is not classified for specific organ toxicity after repeated exposure.

**Aspiration hazard**

The product is not classified as being toxic for aspiration.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

The product is not classified as an endocrine disruptor for human health.

**11.2.2. Other information**

Not indicated.

## SECTION 12: Ecological information

**12.1. Toxicity**

The product is not to be labelled as a environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

Prevent release on land, in water and drains.

**2-METHYLISOTHIAZOL-3(2H)-ONE**

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 6 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 48 h: 1.68 mg/l

EC50 Algae (*Scenedesmus subspicatus*) 72h: 0.445 mg/l

**12.2. Persistence and degradability**

No information is available.

**12.3. Bioaccumulative potential**

No information is available.

**12.4. Mobility in soil**

No information is available.

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

The product does not contain any substances  $\geq 0,1\%$  that are assessed to be a PBT or a vPvB in accordance with Annex XIII of REACH (EC) No 1907/2006.

**12.6. Endocrine disrupting properties**

The product is not classified as an endocrine disruptor for the environment.

**12.7. Other adverse effects**

No known effects or hazards.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Waste handling of the product

Avoid discharge into sewers.

The product is not classified as hazardous waste.

Empty, rinsed packaging is sent for recycling where practicable.

See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

## SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

### 14.1. UN number or ID number

Not classified as dangerous goods

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Not applicable

### 14.6. Special precautions for user

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

### 14.8 Other transport information

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Not indicated.

### 15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

## SECTION 16: Other information

### 16a. Indication of where changes have been made to the previous version of the safety data sheet

#### Revisions of this document

Earlier versions

2023-09-27 Changes in section(s) 2, 3, 4, 6, 7, 8, 10, 11, 12, 16.

### 16b. Legend to abbreviations and acronyms used in the safety data sheet

#### Full texts for Hazard Class and Category Code mentioned in section 2 and 3

|                          |                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Acute Tox. 2             | Acute toxicity (inhal.), Hazard Category 2 - Acute Tox. 2, H330 - Fatal if inhaled                                                       |
| Acute Tox. 3             | Acute toxicity (dermal), Hazard Category 3 - Acute Tox. 3, H311 - Toxic in contact with skin                                             |
| Acute Tox. 3             | Acute toxicity (oral), Hazard Category 3 - Acute Tox. 3, H301 - Toxic if swallowed                                                       |
| Skin Corr. 1B            | Skin corrosion/irritation, Hazard Category 1B - Skin Corr. 1B, H314 - Causes severe skin burns and eye damage                            |
| Eye Dam. 1               | Serious eye damage/eye irritation, Hazard Category 1 - Eye Dam. 1, H318 - Causes serious eye damage                                      |
| Skin. Sens. 1A           | Respiratory or skin sensitisation, Sensitisation — Skin, hazard category 1A - Skin. Sens. 1A, H317 - May cause an allergic skin reaction |
| Aquatic Acute 1, M = 10  | Hazardous to the aquatic environment — Acute Hazard, Category 1 - Aquatic Acute 1, M = 10, H400 - Very toxic to aquatic life             |
| Aquatic Chronic 1, M = 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1 - Aquatic Chronic 1, M                                                 |

= 1, H410 - Very toxic to aquatic life with long lasting effects

### Explanations of the abbreviations in Section 8

Sk Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

### Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

## 16c. Key literature references and sources for data

### Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2026-09-04.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

### Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 1272/2008 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- 2008/98/EC DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

## 16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

## 16e. List of relevant hazard statements and/or precautionary statements

### Full texts for hazard statements mentioned in section 3

- H330 Fatal if inhaled
- H311 Toxic in contact with skin
- H301 Toxic if swallowed
- H314 Causes severe skin burns and eye damage
- EUH071 Corrosive to the respiratory tract
- H318 Causes serious eye damage
- H317 May cause an allergic skin reaction
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

## 16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

### Warning for misuse

Not indicated.

### Other relevant information

Not indicated

### Editorial information



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