

**Safety data sheet**  
**according to UK REACH (SI 2020/1577) as amended**

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

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

- **1.1 Product identifier**
- **Trade name: Molecular Biology Grade 20% SDS Stock Solution**
- **Product Code:** 20-4002-10, 20-4002-01, 20-4002-05
- **Registration number** Mixture
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC21 Laboratory chemicals
- **Application of the substance / the mixture** Laboratory chemicals
- **Uses advised against**  
Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).  
Processes involving extreme heat use advised against.  
The product is strictly intended for industrial or professional use only.
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**  
Severn Biotech Ltd.  
Unit 2,  
Park Lane,  
Kidderminster,  
Worcestershire.  
DY11 6TJ  
UK  
Tel: 0044 1562 825286  
Fax: 0044 1562 825284  
email: info@severnbiotech.com
- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:**  
Members of the public seeking specific information on poisons should contact:  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to GB-CLP**  
Skin Irrit. 2 H315 Causes skin irritation.  
Eye Dam. 1 H318 Causes serious eye damage.
- **2.2 Label elements**
- **Labelling according to GB-CLP** The product is classified and labelled according to the GB CLP regulation.
- **Hazard pictograms**



GHS05

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Sodium dodecyl sulphate

(Contd. on page 2)

— GB —

## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 1)

- **Hazard statements**

H315 Causes skin irritation.

H318 Causes serious eye damage.

- **Precautionary statements**

P260 Do not breathe mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Aqueous solution of the substance(s) listed below.

- **Dangerous components:**

CAS: 151-21-3 EINECS: 205-788-1 Reg.nr.: 01-2119489461-32-XXXX	Sodium dodecyl sulphate ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Aquatic Chronic 3, H412 Specific concentration limits: Eye Dam. 1; H318: $C \geq 20\%$ Eye Irrit. 2; H319: $10\% \leq C < 20\%$	20 – < 25%
--	---	------------

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:**

Immediately rinse with water.

If skin irritation continues, consult a doctor.

- **After eye contact:**

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

- **Information for doctor:** Treat symptomatically and supportively.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

- **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

GB

(Contd. on page 3)

## Safety data sheet

according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 2)

### \* SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Sulphur Oxides (SO<sub>x</sub>)  
Toxic metal oxide smoke
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.  
Particular danger of slipping on leaked/spilled product.
- **6.2 Environmental precautions:**  
Do not allow to penetrate the ground/soil.  
Do not allow product to reach sewage system or any water course in the undiluted form.
- **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.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Prevent formation of aerosols.  
Ensure good ventilation/exhaustion at the workplace.  
Safety showers and eye wash facilities should be available at the work area.  
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.

(Contd. on page 4)

## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 3)

- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from frost.
- **Storage class:** 12
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### · DNELs

#### CAS: 151-21-3 Sodium dodecyl sulphate

Oral	Long-term systemic effects	24 mg/kg bw/day (general population)
Dermal	Long-term systemic effects	2,440 mg/kg bw/day (general population) 4,060 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	85 mg/m <sup>3</sup> (general population) 285 mg/m <sup>3</sup> (worker)

### · PNECs

#### CAS: 151-21-3 Sodium dodecyl sulphate

Freshwater	176 µg/L
Freshwater - Intermittent releases	55 µg/L
Marine water	17.6 µg/L
Sewage Treatment Plant	1.35 mg/L
Sediment (freshwater)	6.97 mg/kg
Sediment (marine water)	697 µg/kg
Soil	1.29 mg/kg

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Do not eat, drink, smoke or sniff while working.  
Do not inhale gases / fumes / aerosols.  
Ensure that eyewash stations and safety showers are close to the workstation location.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Hand protection**



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

(Contd. on page 5)

## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 4)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



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).

· **Body protection:**



Protective work clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

· **Environmental exposure controls** Do not allow to enter drains, sewers or watercourses.

· **Risk management measures** The operators shall be instructed adequately.

## \* SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· <b>Physical state</b>	Liquid
· <b>Colour:</b>	Clear
· <b>Odour:</b>	Odourless
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	>0 °C
· <b>Boiling point or initial boiling point and boiling range</b>	>100 °C
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH at 20 °C</b>	5 – 6.5
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Fully miscible.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1.1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.

(Contd. on page 6)

## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 5)

· <b>Vapour density</b>	Not determined.
· <b>9.2 Other information</b>	NOTE: The physical data presented above are typical values and should not be construed as a specification.
· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	Product is not self-igniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Solvent content:</b>	
· <b>VOC (EC)</b>	0.00 %
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.
· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Not applicable
· <b>Flammable gases</b>	Not applicable
· <b>Aerosols</b>	Not applicable
· <b>Oxidising gases</b>	Not applicable
· <b>Gases under pressure</b>	Not applicable
· <b>Flammable liquids</b>	Not applicable
· <b>Flammable solids</b>	Not applicable
· <b>Self-reactive substances and mixtures</b>	Not applicable
· <b>Pyrophoric liquids</b>	Not applicable
· <b>Pyrophoric solids</b>	Not applicable
· <b>Self-heating substances and mixtures</b>	Not applicable
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Not applicable
· <b>Oxidising liquids</b>	Not applicable
· <b>Oxidising solids</b>	Not applicable
· <b>Organic peroxides</b>	Not applicable
· <b>Corrosive to metals</b>	Not applicable
· <b>Desensitised explosives</b>	Not applicable

## \* SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
Residue upon drying will decompose on burning. This produces toxic and corrosive gases.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat and static discharge.
- **10.5 Incompatible materials:** Strong acids and oxidising agents
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Sulphur oxides (SOx)  
Toxic metal oxide smoke

GB

(Contd. on page 7)

## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 6)

### SECTION 11: Toxicological information

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

· **Acute toxicity** Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

##### ATE (Acute Toxicity Estimates)

Oral	LD50	6,000 mg/kg (rat)
------	------	-------------------

##### CAS: 151-21-3 Sodium dodecyl sulphate

Oral	LD50	1,200 mg/kg (rat)
------	------	-------------------

Dermal	LD50	> 2,000 mg/kg (rabbit)
--------	------	------------------------

#### · **Primary irritant effect:**

#### · **Skin corrosion/irritation**

Causes skin irritation.

#### · **Serious eye damage/irritation**

Causes serious eye damage.

#### · **Respiratory or 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.

#### · **Subacute to chronic toxicity:** Prolonged or repeated skin contact may irritate and cause dermatitis.

#### · **Additional toxicological information:**

ROUTES OF EXPOSURE: Can be absorbed into the body by ingestion, by inhalation (mist and vapour) and through the skin.

#### · 11.2 Information on other hazards

#### · **Endocrine disrupting properties**

None of the ingredients are listed.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

#### · **Aquatic toxicity:**

##### CAS: 151-21-3 Sodium dodecyl sulphate

EC50 (72 h)	53 – 120 mg/l (aquatic algae and cyanobacteria)
-------------	---

#### · **12.2 Persistence and degradability** biodegradable

#### · **12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.

#### · **12.4 Mobility in soil** No further relevant information available.

#### · **12.5 Results of PBT and vPvB assessment**

#### · **PBT:** Not applicable.

#### · **vPvB:** Not applicable.

#### · **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

#### · **12.7 Other adverse effects**

#### · **Additional ecological information:**

#### · **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

(Contd. on page 8)

## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 7)

Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.

### SECTION 13: Disposal considerations

#### · 13.1 Waste treatment methods

##### · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

#### · Uncleaned packaging:

##### · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Disposal must be made according to official regulations.

Containers, even those that are "empty," may contain residues that can develop hazardous gases and vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

#### · Recommended cleansing agents: Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

#### · 14.1 UN number or ID number

· ADR/RID/ADN, ADN, IMDG, IATA Not applicable

#### · 14.2 UN proper shipping name

· ADR/RID/ADN, ADN, IMDG, IATA Not applicable

#### · 14.3 Transport hazard class(es)

· ADR/RID/ADN, ADN, IMDG, IATA

· Class Not applicable

#### · 14.4 Packing group

· ADR/RID/ADN, IMDG, IATA Not applicable

#### · 14.5 Environmental hazards:

· Marine pollutant: No

#### · 14.6 Special precautions for user

Not applicable.

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

Not applicable.

#### · Transport/Additional information:

Not dangerous according to the above specifications.

#### · UN "Model Regulation":

Not applicable

— GB —

(Contd. on page 9)



## Safety data sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

(Contd. of page 8)

### SECTION 15: Regulatory information

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

##### · Poisons Act

##### · Regulated explosives precursors

None of the ingredients are listed.

##### · Regulated poisons

None of the ingredients are listed.

##### · Reportable explosives precursors

None of the ingredients are listed.

##### · Reportable poisons

None of the ingredients are listed.

#### · Control Of Major Accident Hazards Regulations 2015 (COMAH)

#### · Named dangerous substances - ANNEX I None of the ingredients are listed.

#### · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

#### · Relevant phrases

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

#### · Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

#### · Department issuing SDS: Product safety department.

#### · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

ATE: Acute toxicity estimate values

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

(Contd. on page 10)

— GB —

**Safety data sheet**  
**according to UK REACH (SI 2020/1577) as amended**

Printing date 17.04.2025

Version number 4 (replaces version 3)

Revision: 17.04.2025

---

**Trade name: Molecular Biology Grade 20% SDS Stock Solution**

---

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

(Contd. of page 9)

. \* **Data compared to the previous version altered.**

---

— GB —