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

· 1.1 Product identifier

· Trade name: SDS

· Article number: 30-33-10

• CAS Number: 151-21-3 • EC number: 205-788-1

· Registration number Mixture

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

· Product category

PC1 Adhesives, sealants PC3 Air care products

PC9a Coatings and paints, thinners, paint removers

PC9b Fillers, putties, plasters, modelling clay

PC12 Fertilisers

PC14 Metal surface treatment products

PC21 Laboratory chemicals PC27 Plant protection products

PC31 Polishes and wax blends

PC35 Washing and cleaning products (including solvent based products)

PC39 Cosmetics, personal care products

### · Application of the substance / the mixture

Laboratory reagent

Surface active agent

· Uses advised against

Processes involving extreme heat use advised against.

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving significant release of aerosol, vapour or dust in the breathing zone of workers where they are exposed without suitable respiratory protective equipment (RPE).

Not for personal use in this form or concentration.

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

## $\cdot \ Manufacturer/Supplier:$

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 Regulation (EC) No 1272/2008



Flam. Sol. 2 H228 Flammable solid.

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Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed. Skin Irrit. 2 H315 Causes skin irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the GB CLP regulation.

- · Hazard pictograms GHS02, GHS05, GHS07
- · Signal word Danger
- · Hazard statements

H228 Flammable solid.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P260 Do not breathe dust.

P270 Do not eat, drink or smoke when using this product.

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.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

### **SECTION 3: Composition/information on ingredients**

- · 3.1 Chemical characterisation: Substances
- · CAS No. Description

151-21-3 Sodium dodecyl sulphate

- · Identification number(s)
- EC number: 205-788-1

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

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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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.

### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Carbon dioxide

Water spray

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:

Sulphur Oxides (SOx)

Carbon monoxide (CO)

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Wear fully protective suit.

· Additional information Cool endangered receptacles with water spray.

## **SECTION 6: Accidental release measures**

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

Ensure adequate ventilation

Avoid formation of dust.

Particular danger of slipping on leaked/spilled product.

Keep ignition sources away - no smoking.

Wear protective equipment. Keep unprotected persons away.

#### · 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.

Inform respective authorities in case of seepage into water course or sewage system.

### $\cdot$ 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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### **SECTION 7: Handling and storage**

#### · 7.1 Precautions for safe handling

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.

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

There is a risk of a dust explosion if the following conditions are met:

- The substance is present in very finely distributed form (powder, dust).
- The substance is whirled up in sufficient quantity in the air.
- An ignition source is present (flame, spark, electrostatic discharge, etc.)
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.
- · Information about storage in one common storage facility:

Store away from oxidising agents.

Store away from foodstuffs.

· Further information about storage conditions:

Protect from humidity and water.

Store in cool, dry conditions in well sealed receptacles.

Maximum storage temperature: 30 °C

- · Storage class: 4.1 B
- · 7.3 Specific end use(s) No further relevant information available.

## **SECTION 8: Exposure controls/personal protection**

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see section 7.
- · Ingredients with limit values that require monitoring at the workplace: Not required.

· DNELs		
Oral	DNEL Long-term systemic effects	24 mg/kg bw/day (general population)
Dermal	DNEL Long-term systemic effects	2,440 mg/kg bw/day (general population)
		4,060 mg/kg bw/day (worker)
Inhalative	DNEL Long-term systemic effects	85 mg/m³ (general population)
		285 mg/m³ (worker)

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

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

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#### · 8.2 Exposure controls

- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Do not breathe dust

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Ensure that eyewash stations and safety showers are close to the workstation location.

#### Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

#### · Protection of hands:



Protective gloves.

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

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.

### · 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 protection:



Tightly sealed goggles conforming to EN166.

#### · Body protection:



Protective work clothing

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

### **SECTION 9: Physical and chemical properties**

- $\cdot$  9.1 Information on basic physical and chemical properties
- · General Information
- $\cdot$  Appearance:

Form: Granulate
Colour: Cream coloured
Odour: Odourless
Odour threshold: Not determined.

• **pH-value:** 9.1 (1%)

· Change in condition

**Melting point/freezing point:** 205 °C

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Initial boiling point and boiling range:	216 °C (Decomposes)
· Flash point:	170 °C
· Flammability (solid, gas):	Product is not flammable.
· Auto-ignition temperature:	> 300 °C
Decomposition temperature:	Not determined.
· Ignition temperature:	Not determined.
· Explosive properties:	Product is not explosive. However, formation of explosive air/dust mixtures are possible.
· Explosion limits: Lower: Upper:	Not determined. Not determined.
· Vapour pressure at 20 °C:	< 0.2 hPa
· Density at 20 °C: · Relative density · Vapour density · Evaporation rate	0.63 g/cm <sup>3</sup> Not determined. Not applicable. Not applicable.
· Solubility in / Miscibility with water at 20 °C:	>130 g/l
$\cdot \ Partition \ coefficient: \ n\text{-octanol/water at } 20$	°C: -2.03 log POW
· Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.
· 9.2 Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification.

## **SECTION 10: Stability and reactivity**

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

There is a risk of a dust explosion if the following conditions are met:

- The substance is given in very finely distributed form (powder, dust).
- The substance is whirled up in sufficient quantity in the air.
- An ignition source is present (flame, spark, electrostatic discharge, etc.)

Decomposes on heating, producing toxic fumes.

· 10.3 Possibility of hazardous reactions

Reacts with acids.

Reacts with oxidising agents.

- · 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)

## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity

Harmful if swallowed.

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

Oral LD50 1,288 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.
- · 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.

INHALATION RISK: A harmful concentration of airborne particles can be reached quickly especially if powdered.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

## **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability Readily biodegradable
- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

### **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.

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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:

Container remains hazardous when empty. Continue to observe all precautions.

Disposal must be made according to official regulations.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous 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.

<b>SECTION 14: Transport information</b>	
· 14.1 UN-Number · ADR/RID/ADN, IMDG, IATA	UN1325
· 14.2 UN proper shipping name · ADR/RID/ADN	UN1325 FLAMMABLE SOLID, ORGANIC, N.O (Sodium dodecyl sulphate)
· IMDG, IATA	FLAMMABLE SOLID, ORGANIC, N.O.S. (Sodio dodecyl sulphate)
· 14.3 Transport hazard class(es)	
· ADR/RID/ADN, IMDG, IATA	
Class	4.1 Flammable solids, self-reactive substance
· Label	polymerizing substances and solid desensitized explosiv 4.1
· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	Ш
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Flammable solids, self-reactive substance polymerizing substances and solid desensitized explosive
Hazard identification number (Kemler code):	40
· EMS Number: · Stowage Category	F-A,S-G B
Segregation Code	SG72 See 7.2.6.3.2.
14.7 Transport in bulk according to Annex II o	
Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	51
· Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1
· Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	3
· Tunnel restriction code	E

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<ul> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (SODIUM DODECYL SULPHATE), 4.1, III

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- · Regulated explosives precursors Substance is not listed.
- · Regulated poisons Substance is not listed.
- · Reportable explosives precursors Substance is not listed.
- · Reportable poisons Substance is not listed.
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not 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.

#### · 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

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

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

Flam. Sol. 2: Flammable solids – Category 2

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

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

· \* Data compared to the previous version altered.

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