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

· 1.1 Product identifier

· Trade name: SARKOSYL 10%

- · 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).

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).

Processes involving extreme heat use advised against.

- \cdot 1.3 Details of the supplier of the safety data sheet
- · 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



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



Skin Irrit. 2 H315 Causes skin irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

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

- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard-determining components of labelling:

Sodium N-lauroylsarcosinate

· Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

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· Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P362+P364 Take off contaminated clothing and wash it before reuse. P332+P313 If skin irritation occurs: Get medical advice/attention.

· 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:** Mixture of substances listed below with nonhazardous additions.

CAS: 137-16-6 | Sodium N-lauroylsarcosinate | 10% | EINECS: 205-281-5 | Acute Tox. 2, H330; ♦ Eye Dam. 1, H318; ♦ Skin Irrit. 2, Reg.nr.: 01-2119527780-39-XXXX | H315 |

• 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.

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 or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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.

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SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents:

CO2, 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

 \cdot 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Nitrogen oxides (NOx)

Carbon monoxide (CO)

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.

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Do not allow to penetrate the ground/soil.

· 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.

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.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

Safety showers and eye wash facilities should be available at the work area.

Avoid splashes or spray in enclosed areas.

- · 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.
- · Information about storage in one common storage facility:

Store away from oxidising agents.

Store away from foodstuffs.

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· Further information about storage conditions:

Store in a bunded area.

Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

- · 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	· DNELs			
137-16-6 Sodium N-lauroylsarcosinate				
Oral	DNEL Long-term systemic effect	s 10 mg/kg bw/day (general population)		
Dermal	DNEL Long-term systemic effect	s 10 mg/kg bw/day (general population)		
		20 mg/kg bw/day (worker)		
Inhalative	DNEL Long-term systemic effect	s 17.39 mg/m³ (general population)		
		70.53 mg/m³ (worker)		
PNECs				
137-16-6 Sodium N-lauroylsarcosinate				
PNEC Freshwater		8.91 μg/L		
PNEC Freshwater - Intermittent releases		89.1 μg/L		
PNEC Marine water		891 ng/L		
PNEC Marine Water - Intermittent releases		8.91 μg/L		
PNEC Sewage Treatment Plant		3 mg/L		
PNEC Sediment (freshwater)		64.2 μg/kg		
PNEC Sediment (marine water)		6.4 μg/kg		
PNEC Soil		7.6 µg/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.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

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

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.
- · Hand protection



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 (Contd. on page 5)

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· Material of gloves

Nitrile rubber, NBR

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

· Eye/face 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.

- 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

· Physical state Fluid · Colour: Light yellow · Odour: Mild

· Odour threshold: Not determined. · Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

range 100 °C

· Flammability Not applicable.

· Lower and upper explosion limit

· Lower: Not determined. · Upper: Not determined. · Flash point: Not applicable. · Decomposition temperature: Not determined.

· pH at 20 °C 7.5 - 8.5

· Viscosity:

Not determined. · Kinematic viscosity · Dynamic: Not determined.

· Solubility

· water: Fully miscible. Not determined. · Partition coefficient n-octanol/water (log value)

· Vapour pressure at 20 °C: 23 hPa

· Density and/or relative density

· Density at 20 °C: 1.03 g/cm³ · Relative density Not determined. · Vapour density Not determined.

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· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health and

environment, and on safety.

Product is not self-igniting. · Ignition temperature:

· Explosive properties: Product does not present an explosion hazard.

· Solvent content:

0.00% · VOC (EC)

· Change in condition

· Evaporation rate Not determined.

· Information with regard to physical hazard classes

· Explosives Void · Flammable gases Void · Aerosols Void · Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable

gases in contact with water

Void · Oxidising liquids Void · Oxidising solids Void · Organic peroxides Void

· Corrosive to metals Void · Desensitised explosives Void

SECTION 10: Stability and reactivity

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

No decomposition if used and stored according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid Heat and static discharge.
- · 10.5 Incompatible materials: Strong oxidising agents.
- · 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

Toxic metal oxide smoke

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:

137-16-6 Sodium N-laurovlsarcosinate

Oral LD50 > 5,000 mg/kg (rat)

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Inhalative LC50/4 h 50 mg/l (rat)

- · Skin corrosion/irritation Causes skin irritation.
- · Serious eye damage/irritation

Causes serious eve 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.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

137-16-6 Sodium N-lauroylsarcosinate

EC50 (96 h) 30 mg/l (Bacteria) EC50 (72 h) 79 mg/l (Algae)

EC50 (3 h) 30 mg/L (Bacteria)

- · 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.
- \cdot 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 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

· European waste catalogue

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

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- · 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 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.

SECTION 14: Transport informatio	\mathbf{m}
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· 14.1 UN number or ID number · ADR/RID/ADN, IMDG, IATA	Not applicable	
· 14.2 UN proper shipping name · ADR/RID/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.		

Not applicable

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Poisons Act
- · Regulated explosives precursors

· UN "Model Regulation":

None of the ingredients is listed.

· Regulated poisons

None of the ingredients is listed.

· Reportable explosives precursors

None of the ingredients is listed.

· Reportable poisons

None of the ingredients is listed.

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

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· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is 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

H315 Causes skin irritation.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

· 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.
- · Date of previous version: 05.11.2012
- · Version number of previous version: 2
- · 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. 2: Acute toxicity – Category 2

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

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

* * Data compared to the previous version altered.

GB