# SAFETY DATA SHEET

## Hyaluronic acid sodium salt (from bacteria Streptococcus equi)

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

### *1.1. Product identifier*

**Product name** Hyaluronic acid sodium salt (from bacteria Streptococcus equi)

**Product number** 11130212

**CAS number** 9067-32-7

**EC number** 618-620-0

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

**Identified uses** For research purposes only.

**Uses advised against** No specific uses advised against are identified.

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

**Supplier**

Molekula Ltd.
Lingfield Way,
Darlington,
DL1 4XX,
United Kingdom
+44 (0) 3302000333
info@molekula.com

### *1.4. Emergency telephone number*

## SECTION 2: Hazards identification

### *2.1. Classification of the substance or mixture*

**Classification (SI 2019 No. 720)**

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

### *2.2. Label elements*

**EC number** 618-620-0

**Hazard statements** NC Not Classified

### *2.3. Other hazards*

This substance is not classified as PBT or vPvB according to current UK criteria.

## SECTION 3: Composition/information on ingredients

### *3.1. Substances*

**Product name** Hyaluronic acid sodium salt (from bacteria Streptococcus equi)

**CAS number** 9067-32-7

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| | |
|---|---|
| **EC number** | 618-620-0 |

## SECTION 4: First aid measures

### *4.1. Description of first aid measures*

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|---|---|
| **General information** | If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel. |
| **Inhalation** | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if any discomfort continues. |
| **Ingestion** | No specific recommendations. If throat irritation or coughing persists, proceed as follows. Rinse mouth. Get medical attention if any discomfort continues. |
| **Skin contact** | No specific recommendations. Rinse with water. Get medical attention if any discomfort continues. |
| **Eye contact** | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues. |
| **Protection of first aiders** | Use protective equipment appropriate for surrounding materials. |

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

| | |
|---|---|
| **General information** | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| **Inhalation** | A single exposure may cause the following adverse effects: Temporary irritation. |
| **Ingestion** | May cause discomfort if swallowed. |
| **Skin contact** | Prolonged contact may cause dryness of the skin. |
| **Eye contact** | May be slightly irritating to eyes. |

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

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| **Notes for the doctor** | Treat symptomatically. |
| **Specific treatments** | No special treatment required. |

## SECTION 5: Firefighting measures

### *5.1. Extinguishing media*

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| **Suitable extinguishing media** | Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire. |
| **Unsuitable extinguishing media** | Do not use water jet as an extinguisher, as this will spread the fire. |

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

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|---|---|
| **Specific hazards** | None known. |
| **Hazardous combustion products** | Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. |

### *5.3. Advice for firefighters*

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|---|---|
| **Protective actions during firefighting** | Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. |

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|---|---|
| **Special protective equipment for firefighters** | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents. |

## SECTION 6: Accidental release measures

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

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|---|---|
| **Personal precautions** | No specific recommendations. For personal protection, see Section 8. |

### *6.2. Environmental precautions*

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|---|---|
| **Environmental precautions** | Avoid discharge into drains or watercourses or onto the ground. |

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

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| **Methods for cleaning up** | Reuse or recycle products wherever possible. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations. |

### *6.4. Reference to other sections*

| | |
|---|---|
| **Reference to other sections** | For personal protection, see Section 8. For waste disposal, see Section 13. |

## SECTION 7: Handling and storage

### *7.1. Precautions for safe handling*

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|---|---|
| **Usage precautions** | Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. |
| **Advice on general occupational hygiene** | Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. |

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

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| **Storage precautions** | Store away from incompatible materials (see Section 10).<br><br>Hygroscopic.<br>Moisture sensitive. Store under inert gas.<br>Store at temperatures between -15°C/5°F and -20°C/-4°F. |
| **Storage class** | Unspecified storage. |

### *7.3. Specific end use(s)*

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|---|---|
| **Specific end use(s)** | The identified uses for this product are detailed in Section 1.2. |

## SECTION 8: Exposure controls/Personal protection

### *8.1. Control parameters*

### *8.2. Exposure controls*

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|---|---|
| **Appropriate engineering controls** | No specific ventilation requirements. |
| **Eye/face protection** | No specific eye protection required during normal use. Large Spillages: Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. |
| **Hand protection** | No specific hand protection recommended. Large Spillages: Wear protective gloves. |
| **Hygiene measures** | Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. |

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|---|---|
| **Respiratory protection** | No specific recommendations. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn. |
| **Environmental exposure controls** | Not regarded as dangerous for the environment. |

## SECTION 9: Physical and chemical properties

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

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|---|---|
| **Appearance** | Powder. |
| **Colour** | White. or White/off-white. or Cream. |
| **Odour** | Not known. |
| **Odour threshold** | No information available. |
| **pH** | pH (diluted solution): 5.5-7.5 1% soultion |
| **Melting point** | No information available. |
| **Initial boiling point and range** | No information available. |
| **Flash point** | No information available. |
| **Evaporation rate** | No information available. |
| **Flammability (solid, gas)** | No information available. |
| **Upper/lower flammability or explosive limits** | No information available. |
| **Vapour pressure** | No information available. |
| **Vapour density** | No information available. |
| **Relative density** | 1.78 |
| **Solubility(ies)** | Soluble in water. |
| **Partition coefficient** | No information available. |
| **Auto-ignition temperature** | No information available. |
| **Decomposition Temperature** | No information available. |

### *9.2. Other information*

## SECTION 10: Stability and reactivity

### *10.1. Reactivity*

| | |
|---|---|
| **Reactivity** | See the other subsections of this section for further details. |

### *10.2. Chemical stability*

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|---|---|
| **Stability** | Stable under the prescribed storage conditions.<br>Store at temperatures between -15°C/5°F and -20°C/-4°F. |

### *10.3. Possibility of hazardous reactions*

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|---|---|
| **Possibility of hazardous reactions** | No potentially hazardous reactions known. |

### *10.4. Conditions to avoid*

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|---|---|
| **Conditions to avoid** | There are no known conditions that are likely to result in a hazardous situation. |

### *10.5. Incompatible materials*

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**Materials to avoid** Strong oxidising agents.

*10.6. Hazardous decomposition products*

**Hazardous decomposition products** Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

## SECTION 11: Toxicological information

*11.1. Information on toxicological effects*

**Acute toxicity - oral**

**Summary** Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

**Summary** Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

**Summary** Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**Summary** Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

**Summary** Based on available data the classification criteria are not met.

**Respiratory sensitisation**

**Summary** Based on available data the classification criteria are not met.

**Skin sensitisation**

**Summary** Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

**Summary** Based on available data the classification criteria are not met.

**Carcinogenicity**

**Summary** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

**Reproductive toxicity**

**Summary** Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

**Summary** Based on available data the classification criteria are not met.

**Specific target organ toxicity - repeated exposure**

**Summary** Based on available data the classification criteria are not met.

**Aspiration hazard**

**Summary** Not relevant. Solid.

**General information** No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** A single exposure may cause the following adverse effects: Temporary irritation.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** Prolonged contact may cause dryness of the skin.

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**Eye contact** May be slightly irritating to eyes.

**Route of exposure** Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

## SECTION 12: Ecological information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### *12.1. Toxicity*

**Acute aquatic toxicity**

**Summary** Based on available data the classification criteria are not met.

**Chronic aquatic toxicity**

**Summary** Based on available data the classification criteria are not met.

### *12.2. Persistence and degradability*

**Persistence and degradability** The degradability of the product is not known.

### *12.3. Bioaccumulative potential*

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** No information available.

### *12.4. Mobility in soil*

**Mobility** No data available.

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

### *12.6. Other adverse effects*

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### *13.1. Waste treatment methods*

**General information** The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.

**Disposal methods** Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### *14.1. UN number*

Not applicable.

### *14.2. UN proper shipping name*

Not applicable.

### *14.3. Transport hazard class(es)*

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No transport warning sign required.

### *14.4. Packing group*

Not applicable.

### *14.5. Environmental hazards*

**Environmentally hazardous substance/marine pollutant**
No.

### *14.6. Special precautions for user*

Not applicable.

### *14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code*

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|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not applicable. |

## SECTION 15: Regulatory information

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

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|---|---|
| **National regulations** | Health and Safety at Work etc. Act 1974 (as amended).<br>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].<br>EH40/2005 Workplace exposure limits. |

### *15.2. Chemical safety assessment*

No chemical safety assessment has been carried out.

### Inventories

**EU - EINECS/ELINCS**
None of the ingredients are listed or exempt.

## SECTION 16: Other information

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|---|---|
| **Abbreviations and acronyms used in the safety data sheet** | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.<br>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.<br>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.<br>IATA: International Air Transport Association.<br>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.<br>IMDG: International Maritime Dangerous Goods.<br>CAS: Chemical Abstracts Service.<br>ATE: Acute Toxicity Estimate.<br>LC50: Lethal Concentration to 50 % of a test population.<br>LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).<br>$EC_{50}$: 50% of maximal Effective Concentration.<br>PBT: Persistent, Bioaccumulative and Toxic substance.<br>vPvB: Very Persistent and Very Bioaccumulative. |
| **Training advice** | Only trained personnel should use this material. |
| **Revision date** | 30/03/2022 |
| **Revision** | 1 |
| **SDS number** | 814 |

# Hyaluronic acid sodium salt (from bacteria Streptococcus equi)

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.