Heparin Disaccharide

Section 1 – Chemical product and company identification

Supplier: Iduron
Address: c/o Biohub
Alderley Park
Alderley Edge
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UK
Contact email info@iduron.co.uk
Product name: Heparin disaccharide
Product use: Scientific research
Catalogue no: HD004

Section 2 – Composition

Structure: \( \Delta \text{UA} - \text{GlcNS},6\text{S} \)
\( \text{C}_{12}\text{H}_{16}\text{NO}_{15}\text{S}_{2}\text{Na}_{3} \)
Produced by the action of bacterial Heparinases and isolated by high resolution gel filtration and ion exchange chromatography. The uronate (HexA) contains a C4-C5 double bond due to the action of the heparinases used to depolymerise heparin.

![Heparin Disaccharide Structure](image)

Quantity: 1mg per vial
Appearance: White powder
Origin: High quality porcine mucosal heparin.
Purity: > 95%

Section 3 – Hazards identification
We are not aware of any toxicity associated with this product. In common with good laboratory practice the material should only be handled by qualified personnel trained in laboratory procedures and familiar with potential hazards. These products are not intended for human consumption, drug use or any form of human experimentation.

Section 4 – First aid measures

If inhaled. If breathed in, move person into fresh air. If not breathing give artificial respiration
In case of skin contact
Wash off with soap and plenty of water.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person.
Rinse mouth with water.

Section 5 – Fire fighting measures

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 – Accidental release measures

Personal precautions
Avoid dust formation.
Environmental precautions
Do not let product enter drains.
Methods for cleaning up; sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 – Handling and storage
Handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: -20 °C. Hygroscopic

Section 8 – Exposure control/personal protection

Contains no substances with occupational exposure limit values.
Personal protective equipment and respiratory protection:
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand protection
For prolonged or repeated contact use protective gloves.
Eye protection
Safety glasses
Hygiene measures
General industrial hygiene practice.

Section 9 – Physical and chemical properties

Appearance
Form solid
Safety data
pH no data available
Melting point no data available
Boiling point no data available
Flash point no data available
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

Section 10 – Stability and reactivity

Storage stability
Very stable under recommended storage conditions; -20°C.
Conditions to avoid
Avoid moisture.
Materials to avoid
Strong oxidizing agents
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides. Sulphur oxides, Sodium oxides

Section 11 – Toxicological information

Acute toxicity
no data available
Irritation and corrosion
no data available
Sensitisation
no data available
Chronic exposure
IARC: No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Signs and Symptoms of Exposure
Heparin and its salts act as anticoagulants subcutaneously or intravenously. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.
Target Organs Blood.

Section 12 – Ecological information

Elimination information (persistence and degradability)
no data available
Ecotoxicity effects
no data available

Section 13 – Disposal information

Observe all federal, state, and local environmental regulations.
Contaminated packaging - Dispose of as unused product.

Section 14 – Transport information

ADR/RID
Not dangerous goods
IMDG
Not dangerous goods
IATA
Not dangerous goods

Section 15 - Regulatory information

Labelling according to EC Directives
Further information:
The product does not need to be labelled in accordance with EC directives or respective national laws.

Section 16 – Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of
the properties of the product. Iduron Ltd., shall not be held liable for any damage resulting from handling or from contact with the above product.