



MATERIAL SAFETY DATA SHEET



HEPARIN SODIUM



File Number: MSDS-H-2011-01;

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Revision History:

File Number	Date	Content of Revision
MSDS-H-2011-01	07 July 2011	First version 2011



Hebei Changshan Biochemical Pharmaceutical Co., Ltd.



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY/UNDERTAKING

Manufacturer: Hebei Changshan Biochemical Pharmaceutical Co., Ltd.

Add: No.9 Fuqiang Road, Zhengding Shijiazhuang, Hebei, China.

Tel: (86)311-87818332/87814156 Fax: (86)311-87817220 P.C.:050800

Http://www.heparin.cn

E-mail: changshan@heparin.cn

Product Name: Heparin

Chemical Name/Other Name: Sodium Heparinate

Chemical Formula: $(C_{12}H_{16}NS_2Na_3)_n$

Chemical Family: Mucopolysaccharide

Use: Medicine



2. HAZARDS IDENTIFICATION

Harmful by inhalation and if swallowed. May cause sensitisation by inhalation and skin contact.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Heparin sodium (preparation containing the sodium salt of a sulphated glucosaminoglycan present in mammalian tissues).

CAS: 9041-08-1

EC No: None

EC Index number: None

NB: Anticoagulants

R phrases: R21/22, R42/43



4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing becomes difficult, call a physician.

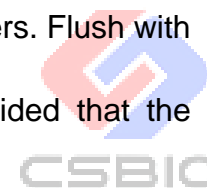
Skin contact: Flush with copious amounts of water and soap for at least 15 minutes. Remove contaminated clothing and shoes.

Eyes contact: Assure adequate flushing by separating the eyelids with fingers. Flush with copious amounts of water for at least 15 minutes.

Ingestion: Wash out mouth with water and administer fresh water provided that the person is conscious. Do not induce vomiting.

Monitor respiration and pulse.

In case of reactions described in hazards identification / toxicological information or other severe, immediate or persisting symptoms seek medical advice and call the nearest poison centre. Show the label and this safety data sheet.



5. FIRE FIGHTING MEASURES

Extinguishing media: Carbon dioxide, dry chemical powder or appropriate foam. Water spray.

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions. Risk of dust explosion cannot be excluded.



Dangerous combustion products: CO_x, NO_x and other noxious gases or vapours in case of incomplete combustion.

6. ACCIDENTAL RELEASE MEASURES

Switch off electrical equipment and any other sources of ignition. Evacuate area. Wear self-contained breathing apparatus, appropriate boots and heavy rubber gloves. Collect residues manually, by wiping with a small quantity of water, place in a bag and hold for waste disposal. Avoid raising dust/mist. Ventilate area and wash spill site with water after material pick up is complete.

7. HANDLING AND STORAGE

Ensure adequate ventilation.

Handling: Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

Avoid use with incompatible materials. Recommended for quality reasons: Handle protected from humidity and light.

Storage Requirements: Store in suitable containers. Keep containers tightly closed. Store in a dry, well-ventilated area, out of direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Handling of small quantities in fume hood recommended. Mechanical exhaust, safety shower and eye bath required.

Respiratory protection: Protecting mask (filter P2), if sole means of protection.

Hand protection: Compatible chemical-resistant gloves.

Eye protection: Wear protective chemical safety goggles.

Skin protection: Wear protective suit.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: A white or almost white powder, hygroscopic.

Odour: No data available.

Solubility: Freely soluble in water.

Melting point: No data available.

Flash point: No data available.

Boiling Point: No data available.

Freezing Point: No data available.

Specific Gravity: No data available.

Vapour Pressure: No data available.

Vapour Density: No data available.

Evaporation Rate: No data available.

pH: 5.5 to 8.0 (1% solution)

Log Pow: No data available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended conditions of use.

Conditions to avoid: Humidity. Light.

Materials to avoid: Strong oxidizing agents.



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Dangerous decomposition products: CO_x, NO_x and other substances in case of incomplete decomposition.

Hazardous polymerisation will not occur.

11. TOXICOLOGICAL INFORMATION

RTECS No: MI0850000

See actual entry in RTECS for complete information.

LD50 (oral-rat): 1950 mg/kg (Heparin)

Harmful by inhalation and if swallowed.

May cause sensitisation by inhalation and skin contact. Risk of carcinogenicity, mutagenicity, reproductive toxicity and narcosis cannot be excluded.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to aquatic organisms cannot be excluded.

Biodegradation: No data available.

Bioaccumulation and mobility:

Log Pow: No data available.



13. DISPOSAL CONSIDERATIONS

Incinerate in an approved facility.

Observe all regional, national, federal state and local environmental regulations.

14. TRANSPORT INFORMATION

Transport regulation	UN Classification: UN number shipping name – Class (other risk)– PG
IATA/ICAO (air)	Not classified
ADR/RID (road/railway)	Not classified
IMDG (sea)	Not classified

Marine pollutant: Not classified

15. REGULATORY INFORMATION

R phrases:

R20/22 Harmful by inhalation and if swallowed.

R42/43 May cause sensitization by inhalation and skin contact.

S phrases:

S22 Do not breathe dust.

S36/37 Wear suitable protective clothing and gloves.

S45 In case of accident or if you feel unwell, seek medical advice immediately.

Show the label where possible.



16. OTHER INFORMATION

Reason for update:

Revision according to Regulation (EC) No 1907/2006.

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R42/43 May cause sensitisation by inhalation and skin contact.