

Manufacturing Site: A-1/2102 & 2103, Phase-III, G.I.D.C, Vapi-396 195, Gujarat. India

Safety Data Sheet	)
<b>Document No.:</b> FP/PPS/SDS/010/00	Revision No.: 00
Effective Date: 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 1 of 10

1) Product and company Identificati	on	
GHS Product Identifier	Pentosan Polysulfate Sodium.	
CAS Number	140207-93-8	
EC Number	Not available.	
Chemical Name	[(2R, 3R, 4S, 5R)-2-hydroxy-5- [(2S, 3R, 4S, 5R)-5-hydroxy-3, 4-disulfooxyoxan-2-yl] oxy-3-sulfooxyoxan-4-yl] hydrogen sulphate.	
Other means of Identification	(1→4)-β-D-Xylan 2,3-bis (hydrogen sulphate) sodium; Xylan hydrogen sulphate sodium salt; Xylan Polysulfate sodium; Sodium Pentosan Polysulfate; Sodium Pentosan Polysulfate; Xylan sulphate sodium; Xylofuranan sulphate sodium; Sodium xylan Polysulfate.	
Chemical Formula	$[C_{62}H_{72}O_{122}S_{24}Na_{25})]_x$ (where x = 1 to 1.5)	
RTECS	Not available.	
Recommended use of the chemical and restrictions on use.	Anti-coagulating agent	
Supplier Details Including name, address, phone number etc.)	Swati Spentose Pvt Ltd.  Corporate Office: 114, Marine Chambers, 11 New Marine Lines, Mumbai-400020, India  Manufacturing Unit: A-1/2102 & 2103, Phase-III, G.I.D.C, Vapi-396195, Gujarat, India	
Emergency Phone Number	0260-2433133	

#### 2) Hazards Identification

GHS Classification of the substance/mixture and any national or regional information Harmful if swallowed (Category 4), SeriousIrritating to Eyes (Category 2A), and target Organ Systemic Toxicity (Category 3), May cause Causes skin Irritation (Category 2).

Activity	Prepared By	Checked By	Approved By
Sign & Date	Sushen Pan' 16/04/19	76/04/7d	120M19
Name & Designation	Mr. Sushant Rai Officer-EHS	Mr. Jitendra Varma Project & MNT - Head	Mr. S. K. Srivastava Corporate Head QA & QC



Manufacturing Site: A-1/2102 & 2103, Phase-III, G.I.D.C, Vapi-396 195, Gujarat. India

Safety Data Sheet	200
<b>Document No.:</b> FP/PPS/SDS/010/00	Revision No.: 00
<b>Effective Date</b> : 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 2 of 10

Labelling according to Regulation (EC) No 1272/2008 [CLP] Pictogram(s): Signal word: Warning Hazard statement(s): H302 Harmful if swallowed H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation Precautionary statement(s): Label elements P261 Avoid breathing dust/fume/gas/mist/vapours/spray P305+P351+P338 IF IN EYES Rinse cautiously with water f or several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P332+P350IF SKIN irritation occurs: Gently wash with plenty of soap and water. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Swati Spentose Pvt Ltd. A-1/2102 & 2103, Phase-III, G.I.D.C Vapi-396195, Gujarat, India Ph. No: 0260-2433133 Other hazards which do not Not available covered by GHS.

3) Composition/Information on l	<u>Ingredients</u>	
Name	CAS#	% by Weight
Pentosan Polysulfate Sodium.	140207-93-8	100%
Toxicological Data on Ingredients:Pentosan Polysulfate SodiumOral LD50 (Mouse): 300 mg/kg,		

**Toxicological Data on Ingredients:**Pentosan Polysulfate SodiumOral LD50 (Mouse): 300 mg/kg, Rabbit eye: 100mg/24 moderate, Oral rabbit LD50: 3200mg/kg Oral rat LD50: 980mg/kg, LC50: Not

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Safety Data Sheet	
Document No.: FP/PPS/SDS/010/00	Revision No.: 00
Effective Date: 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 3 of 10

available. Dermal LD50: Not available.

1) First Aid Massaures	
Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact and ingestion.	Eye Contact: Flush with copious amounts of water for at least 15 minutes. Consult a doctor.  Skin Contact:Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.  Serious Skin Contact:Not available.  Inhalation:May cause breathing difficulty. Remove to fresh air and seek medical attention. If breathing is difficult, give oxygen.  Serious Inhalation:Not available.  Ingestion:Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  Serious Ingestion: Not available  If swallowed: May cause pain, vomiting and diarrheal. Wash out mouth with water and drink 2-4 cups of milk or water, seek medical attention.
Most important symptoms /Effects/, Acute and Delayed.	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
Indication of immediate medical attention and special treatment needed, if necessary	Not available.

5) Fire Fighting Measures		
Suitable and unsuitable extinguishing media.	Flammability of the Product:Not available. Auto-Ignition Temperature:Not available. Flash Points:Not available. Flammable Limits:Not available.	

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Safety Data Sheet	
Document No.: FP/PPS/SDS/010/00	Revision No.: 00
<b>Effective Date</b> : 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 4 of 10

s of Combustion: These products are carbon CO, CO2).  zards in Presence of Various Substances: o emit irritating fumes under f ire conditions.
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emit irritating fumes under f ire conditions.
emit irritating fumes under f ire conditions.
asonable care to avoid contamination of
rses and drains.
n Hazards in Presence of Various
ces:Risk of explosion of the product in presence
nical impact: Not available. Risks of explosion
roduct in presence of static discharge: Not
ting Media and Instructions:
FIRE: Use DRY chemical powder. LARGE
er spray, dry chemical powder, carbon dioxide
or spray, ary enomical powder, embon dioxide
Remarks on Fire Hazards:Not available.
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demarks on Explosion Hazards: Not available.
able.
able protective clothing to prevent contact with
eyes and self-contained breathing apparatus.
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6) Accidental Release Measures	
Personal Precautions, Protective Equipment and emergency procedures.	Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear appropriate personal protective equipment.
Environmental Precautions. Methods and materials for containment and cleaning up.	Do not let product enter drains.

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Safety Data Sheet	
Document No.: FP/PPS/SDS/010/00	Revision No.: 00
Effective Date: 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 5 of 10

Methods and material for containment for and cleaning up.

Sweep up and place in closed containers for waste disposal. Avoid raising dust. Ventilate area and thoroughly wash spill site after material pickup is complete.

7) <u>Handling &amp; Storage</u>	
Precautions for safe handling	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation.
Conditions for safe storage, including any incompatibilities	Keep the container tightly closed. Store in the original package.

8) Exposure Controls/Personal Protection	
Control parameter	Exposure Limits: Not available
Appropriate engineering controls	Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.
Individual Protection measures, Such as personal protective equipment	Personal Protection: Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.  Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be enough; consult a specialist BEFORE handling this product.

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Safety Data Sheet	
Document No.: FP/PPS/SDS/010/00	Revision No.: 00
Effective Date: 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 6 of 10

9) Physical and Chemical Properties		
Appearance (Physical state, colour, etc.)	Solid, White to pale yellow powder.	
Odour	Odourless.	
Odour Threshold	Not available.	
pH (1% soln./water)	4-6	
Melting Point,range /Freezing Point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash Point	Not available.	
Evaporation Rate	Not available.	
Flammability (Solid, Gas)	Not available.	
Upper/Lower Flammability or Explosive Limits	Not available.	
Vapour Pressure	Not available.	
Vapour Density	Not available.	
Relative Density	Not available.	
Solubility in / Miscibility with	Soluble in water, soluble in 0.1N NaOH solution and practically insoluble in methanol.	
Solubility in water	Soluble.	
Molecular weight	4000 to 6000 Daltons.	
Partition Coefficient	Not available.	
Auto-ignition Temperature	Not available.	
Decomposition Temperature	Not available.	

10) Stability & Reactivity Data	
Chemical Stability	Material is stable under normal conditions.
Possibility of Hazardous Reactions	Not available.
Conditions to Avoid	Not available.
Incompatible Materials	Strong oxidising agents and strong bases.
Hazardous Decomposition	Toxic fumes of Carbon monoxide, carbon dioxide, and

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Safety Data Sheet	
Document No.: FP/PPS/SDS/010/00	Revision No.: 00
Effective Date: 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 7 of 10

Corrosivity	Not available.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Not available.

11) Toxicological Information		
Information on the Likely routs of exposure	Dermal contact. Eye contact. Inhalation. Ingestion.	
Symptoms related to the Physical, Chemical and Toxicological characteristics;	Not available.	
Delayed and immediate effects and also chronic effects from short-and long-term exposure;  Chronic Effects on Humans:Not available.  Special Remarks on Toxicity to A available.  Special Remarks on Chronic Humans:Not available.  Special Remarks on other Toxic Humans: Not available.		
Acute Toxicity (such as acute toxicity estimates).	Not available.	
Information on Toxicological Effects	LD50/oral/rat = 980mg/kg LD50/oral/mouse = 300 mg/kg LD50/oral/rabbit = 3200mg/kg LD 50 (Intraperitoneal) =Not available. LD 50 (Intravenous) =Not available. LD50/dermal/rat = Not available. LC50/inhalation/rat = Not available. LC50/inhalation/mouse = Not available.	
Target Organ Systemic Toxicity: Single Exposure & Repeated Exposure	Respiratory tract irritation	

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Safety Data Sheet	
Document No.: FP/PPS/SDS/010/00	Revision No.: 00
Effective Date: 18/04/2019	Supersede No.: Nil
Product Name: Pentosan Polysulfate Sodium	Page 8 of 10

12) Ecological Information		
Eco toxicity (aquatic and terrestrial, where available).	No specific ecology data is available. Do not allow to enter drains, sewers and watercourses.	
Persistence and degradability	BOD5 and COD:Not available. Products of Biodegradation: Not available. Toxicity of the Products of Biodegradation:Not available. Special Remarks on the Products of Biodegradation:Not available.	
Bio accumulative Potential	Not available.	

13) Disposal Consideration	
	Recommendation: Must not be disposed
	of together with household garbage. Do not
Description of waste residues and information on	allow product to reach sewage system.
their safe handling and methods of disposal,	Contaminated packaging: Disposal
including any contaminated packing.	should be in according with local, state or
	federal legislation. Dispose of as hazardous
	waste. Incineration is recommended

14) <u>Transport Information</u>	
UN Number	Not available.
UN Proper Shipping Name	Not available.
Transport Hazard Class (es).	Not available.
Packaging group (DOT, ADR, IMDG, IATA)	Not available.
Environmental hazards	Not available.
Special precautions which a user needs to be aware of or needs comply with in connection with transport or conveyance either within or	Not available.

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Document No.: FP/PPS/SDS/010/00	Revision No.: 00	
Effective Date: 18/04/2019	Supersede No.: Nil	
Product Name: Pentosan Polysulfate Sodium	Page 9 of 10	

15) Regulatory Information

Safety, Health and environmental

regulations specific for the

product on question.

Federal and State Regulations:

Other Regulations: European Labelling in accordance with EC directives. Hazard Symbols: XN, Risk Phrases: R-22 (Harmful if swallowed). Safety Phrases: WGK (Water Danger/Protection). Canada: CAS# is listed on the Canada's DSL list. CAS# is not listed on the Canada's Ingredient Disclosure list. CAS# is listed on the TSCA inventory.

Other Classifications:

HMIS (U.S.A.): Not available. Health Hazard: Not available. Fire Hazard: Not available. Reactivity: Not available.

Personal Protection: Not available.

National Fire Protection Association (U.S.A.): Not

available.

Health: Not available.

Flammability: Not available. Reactivity: Not available. Specific hazard: Not available.

16) Other Information

information including Other information on preparation and revision of SDS

This data is furnished gratuitously independent of any sales of the product and only for your investigation and independent verification. While the information is believed to be correct, Swati Spentose Private Limited shall in no event be any responsible for any damages whatsoever, directly or indirectly resulting in the use of or reliance upon data contained herein. No warranty, either expressed or implied, or merchantability, of fitness, or of any nature with respect to the product, or to the data, is made herein. You are urged to obtain data sheets for all Swati Spentose Private Limited products you buy, process, use or distribute, and encouraged to advise anyone working with or exposed to such products of the information contained herein.

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Document No.: FP/PPS/SDS/010/00	Revision No.: 00	
Effective Date: 18/04/2019	Supersede No.: Nil	
Product Name: Pentosan Polysulfate Sodium	Page <b>10</b> of <b>10</b>	

#### Abbreviation:

CAS No.	Chemical Abstract Service Number	
RTECS	Registry of Toxic Effects of Chemical Substances	
DOT	Department of Transportation	
UN	United Nations	
LD	Lethal dose	
NTP	National Toxicology Program)	
IARC	International Agency for Research on Cancer	

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