DESCRIPTION

MOISTURIZING TOPICAL PREPARATION

The present invention relates to a topical moisturizing preparation.

Background Art

[0002]

Conventionally, glycerin, propylene glycol, sorbitol, diethylene glycol monoethyl ether, and the like are known as moisturizers. Further, polysulfated mucopolysaccharides, such as chondroitin sulfate, are also used as moisturizers (for example, Patent Literature (PTL) 1). Polysulfated mucopolysaccharides, such as chondroitin sulfate, are known as heparinoid substances (heparins), and are extracted from the organs of animals, such as bovines and pigs.

[0003]

Pentosan polysulfate is known as an alternative heparin substance that can be used as a therapeutic agent for thrombosis, osteoarthritis, etc. (for example, Patent Literature (PTL) 2). Pentosan polysulfate can be obtained by sulfating a plant-derived xylooligosaccharide.

Citation List

Patent Literature

[0004]

PTL 1: JPS62-4362A

PTL 2: WO2010/000013

Summary of Disclosure

Technical Problem

[0005]

An object of the present disclosure is to provide a novel topical moisturizing preparation.

[0005a]

In one aspect, there is provided a topical moisturizing preparation comprising, as an active ingredient, at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 15.0% by mass.

[0005b]

In another aspect, there is provided a use of at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate for the manufacture of a composition for moisturizing the skin, wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 15.0% by mass.

[0005c]

In another aspect, there is provided a use of at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate for the manufacture of a composition for maintaining or increasing the water content of skin stratum corneum, wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 15.0% by mass.

CLAIMS

[Claim 1]

A topical moisturizing preparation comprising, as an active ingredient, at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 15.0% by mass.

[Claim 2]

The topical moisturizing preparation according to claim 1, wherein the pentosan polysulfate compound has an acetyl group content of 0% by mass to 0.3% by mass.

[Claim 3]

The topical moisturizing preparation according to claim 1, wherein the pentosan polysulfate compound has a uronic acid content of 7.0% by mass to 15.0% by mass and an acetyl group content of 0% by mass to 2.0% by mass.

[Claim 4]

The topical moisturizing preparation according to claim 2, wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 6.0% by mass.

[Claim 5]

The topical moisturizing preparation according to any one of claims 1 to 4, which comprises pentosan polysulfate sodium as a pharmaceutically acceptable salt of pentosan polysulfate.

[Claim 6]

The topical moisturizing preparation according to any one of claims 1 to 5, wherein the pentosan polysulfate compound has a dispersion degree of 1.00 or more and 1.40 or less.

[Claim 7]

The topical moisturizing preparation according to any

one of claims 1 to 6, which is an aqueous solution containing at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate, in an amount of 0.05% by mass or more and 40% by mass or less, based on the total mass of the topical moisturizing preparation.

[Claim 8]

Use of at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate for the manufacture of a composition for moisturizing the skin,
wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 15.0% by mass.

[Claim 9]

Use of at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate for the manufacture of a composition for maintaining or increasing the water content of skin stratum corneum,
wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 15.0% by mass.

[Claim 10]

The use according to claim 8 or 9, wherein the pentosan

polysulfate compound has an acetyl group content of 0% by mass to 0.3% by mass.

[Claim 11]

The use according to claim 8 or 9, wherein the pentosan polysulfate compound has a uronic acid content of 7.0% by mass to 15.0% by mass and an acetyl group content of 0% by mass to 2.0% by mass.

[Claim 12]

The use according to claim 8 or 9, wherein the pentosan polysulfate compound has a uronic acid content of 0.0% by mass to 6.0% by mass.

[Claim 13]

The use according to any one of claims 8 to 12, wherein the pharmaceutically acceptable salt of pentosan polysulfate comprises pentosan polysulfate sodium.

[Claim 14]

The use according to any one of claims 8 to 13, wherein the pentosan polysulfate compound has a dispersion degree of 1.00 or more and 1.40 or less.

[Claim 15]

The use according to any one of claims 8 to 14, wherein the composition is an aqueous solution containing at least one pentosan polysulfate compound selected from the group consisting of pentosan polysulfate; pharmaceutically acceptable salts of pentosan polysulfate; pharmaceutically acceptable solvates of pentosan polysulfate; and pharmaceutically acceptable solvates of pharmaceutically acceptable salts of pentosan polysulfate, in an amount of 0.05% by mass or more and 40% by mass or less, based on the total mass of the composition.