

Product Information

Product Data Sheet

PFNTAVITIN®

Description

PENTAVITIN® is 100% natural and plant-derived. The Saccharide Isomerate is formed by isomerisation of plant-derived D-glucose and is similar to that of the carbohydrate complex found in human skin. It is suitable for both skin- and hair care applications. PENTAVITIN® is ECOCERT- and COSMOS approved, as well as NATRUE certified.

Product identification

Product code: 50 3315 2

Composition

INCI name	Content	CAS No.	EINECS/ELINCS
Saccharide Isomerate	> 50%	100843-69-4	none
Aqua	25-50%	7732-18-5	231-791-2
Citric Acid	0.1-1%	77-92-9	201-069-1
Sodium Citrate	0.1-1%	68-04-2	200-675-3

The two main components of the Saccharide Isomerate are glucose (CAS No. 50-99-7, EINECS No. 200-075-1) and fructose (CAS No. 57-48-7, EINECS No. 200-333-3).

Specifications

Appearance: clear, yellowish to slightly amber coloured, slightly

viscous liquid

pH: 4.0 - 5.0

Residue on drying: 52.0 - 55.0 % m/m

Relative density d20/20: 1.240 - 1.255 Refractive index n25: 1.422 - 1.430

Identity by Infrared spectrum: corresponds to reference spectrum

Total aerobic mesophile plate count: < 100 CFU / ml

Specified microorganisms: not detectable in one milliliter

Solubility

PENTAVITIN® is soluble in water.



Product Information Product Data Sheet

PFNTAVITIN®

Stability and storage

PENTAVITIN® may be stored for at least 36 months from the date of manufacture in the unopened original container protected from light in a clean place and at a temperature between 15 and 25°C. The 'Best use before' date is printed on the label. Keep package tightly closed. Once opened, use contents quickly. In order to avoid secondary microbial contamination, following opening, containers should be handled with special care.

Uses

PENTAVITIN® is an ingredient for personal care products. PENTAVITIN® can be processed either warm (< 60°C) or cold, and should be incorporated into the aqueous phase of a cosmetic formulation. For skin care preparations, the addition of 1 to 5% PENTAVITIN® is recommended and for hair applications we recommend 0.2% in shampoo and 0.5% in conditioner/treatments.

Certifications

ECOCERT

PENTAVITIN® is approved by Ecocert Greenlife according to the Ecocert Standard for Natural and Organic Cosmetics available at http://cosmetics.ecocert.com.

100% Natural origin, 0% Synthetic origin

COSMOS

PENTAVITIN® is approved by Ecocert Greenlife according to the Cosmos Standard available at http://cosmos.ecocert.com.

100% Natural origin, 67.1% CPAI (Chemically Processed Agro-Ingredient)

NATRUF

PENTAVITIN® complies with the NATRUE criteria 2% Natural (0% Organic), 48% Water, 50% Derived Natural, 0% Nature-identical

Safety

This product is safe for the intended use. Avoid ingestion or direct contact by applying suitable protective measures and personal hygiene.

For full safety information and necessary precautions, please refer to the respective DSM Material Safety Data Sheet.

Legal notice

The information given in this publication is based on our current knowledge and experience, and may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. We do not assume any liability in connection with your product or its use. You must comply with all applicable laws and regulations, and observe all third party rights.



Product Information Product Data Sheet

PENTAVITIN®

Additional information

To find out more about our ingredients, please contact your nearest DSM Nutritional Products office.

DSM Nutritional Products Ltd Product Management Building 241 PO Box 2676 CH-4002 Basel Switzerland	Tel.: +41 (0) 61 815 8899 Internet <u>www.dsmnutritionalproducts.com</u>
DSM Nutritional Products LLC 45 Waterview Boulevard Parsippany, NJ 07054-1298	Tel.: +1 (800) 526 0189 (Human Nutrition, Personal Care) Tel.: +1 (800) 451-8325 (Animal Nutrition) Internet www.unlimitednutrition-na.dsm.com
DSM Nutritional Products Europe Ltd. PO Box 2676 CH-4002 Basel Switzerland	Tel.: +41 (0) 61 815 7777 Internet www.unlimitednutrition-eu.dsm.com
DSM Singapore Industrial Pte Ltd. trading as DSM Nutritional Products Asia Pacific 30 Pasir Panjang Road #13-31 Mapletree Business City Singapore 117440	Tel.: + (65) 66326500 Internet <u>www.dsmnutritionalproducts.com</u>
DSM Nutritional Products China No. 476, Li Bing Road Zhangjiang High-Tech Park Pudong Area, Shanghai 201203 P.R. of China	Tel.: + 86 (0)21 6141 8188 Internet www.dsmnutritionalproducts.cn
DSM Produtos Nutricionais Brasil S.A. Avenida Engenheiro Billings, nº 1729 - Prédio 31 Sala A CEP:05321-010 São Paulo - SP Brasil	Tel.: + 55 (11) 3760-6300 Internet <u>www.dsmnutritionalproducts.com</u>