



D-Panthenol

Popular Name: Provitamin B5; D-Pantothenyl alcohol; D-Panthenol; Dexpanthenol

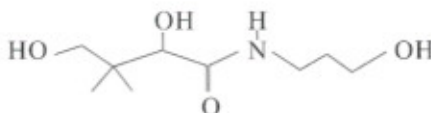
INCI Name: Panthenol

Molecular Formula: C₉H₁₉NO₄

Molecular Weight: 205.25

CAS NO.: 81-13-0

Structural Formula:



Appearance and Character:

Pure D-Panthenol is a colorless, clear, viscous and hygroscopic liquid. It can solidify on prolonged storage. It is freely soluble in water, ethanol, methanol and propylene glycol, soluble in chloroform and in ether, slightly soluble in glycerin, insoluble in vegetable oils, mineral oils and fats.

Property

Appearance
Assay
Identification
Refractive Index (at 20°C)
Specific Rotation
Water
Residue on Ignition
Limit of Aminopropanol
Organic Volatile Impurities

Specification

colorless, clear, viscous liquid
98.0 ~ 102.0%
normal reaction
1.495 ~ 1.502
+29.0° ~ +31.5°
max. 1.0%
max. 0.1%
max. 1.0%
meets USP requirements

Usage:

D-Panthenol is the provitamin of D-Pantothenic acid (Vitamin B5), which plays a key role in the human intermediary metabolism. Deficiency of Vitamin B5 can result in many dermatological disorders. D-Panthenol is applied in pharmaceutical industry and almost all types of cosmetic preparations. It cares hair, skin and nails.

Role in the skin: 1. deep penetrating moisturizer 2. stimulates epithelization
3. wound healing effect 4. anti-inflammatory effect

Role in the hair: 1. long lasting moisturizer 2. prevents hair damage
3. thickens hair 4. improves luster and sheen

Role in nail care: 1. improves hydration 2. imparts flexibility

Stability and Storage:

D-Panthenol is stable to air and light but not heat. If it is stored at below 25°C in the tightly sealed, original containers, it has a shelf life of 24 months. In weakly acidic, aqueous solutions, D-Panthenol is considerably more stable than the salts of pantothenic acid. It is unstable in strong acids and bases.

Package: 20 kg carton (two pails in one carton, 10 kg pail); 200 kg drum

Manufacturer: Zhejiang Xinfu Biochemical Co., Ltd.