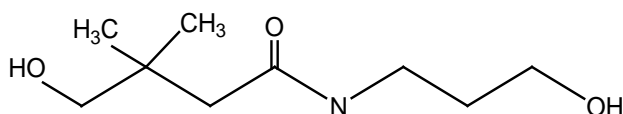


Technical Data Sheet

SFG D-Panthenol

Panthenol (Dexpanthenol)

CAS# 81-13-0



Mol. wt. 205.25

Formula C₉H₁₉NO₄

Description

SFG D-Panthenol is colorless or slight yellowish, viscous and hygroscopic liquid. It may crystallize on prolonged storage.

Specifications – USP43

Item	Specification
Appearance	A colorless or slightly yellowish, viscous hygroscopic liquid
Identification	A. Infrared absorption (197F) B. The Sample solution: a deep blue color develops. C. The Sample solution: a purplish red color develops.
Assay (% , on dried basis)	98.0 ~ 102.0
Water (%)	≤ 1.0
Specific optical rotation (°)	+29.0 ~ +31.5
Limit of aminopropanol (%)	≤ 1.0
Residue on ignition (%)	≤ 0.1
pH	≤ 10.5
Refractive index (20°C)	1.495 ~ 1.502
Heavy metals (ppm)	≤ 20

Solubility

Water	Soluble	Fats	Insoluble
Methanol	Soluble	Oils	Insoluble
Ethanol	Soluble		
Propylene glycol	Soluble		

Applications

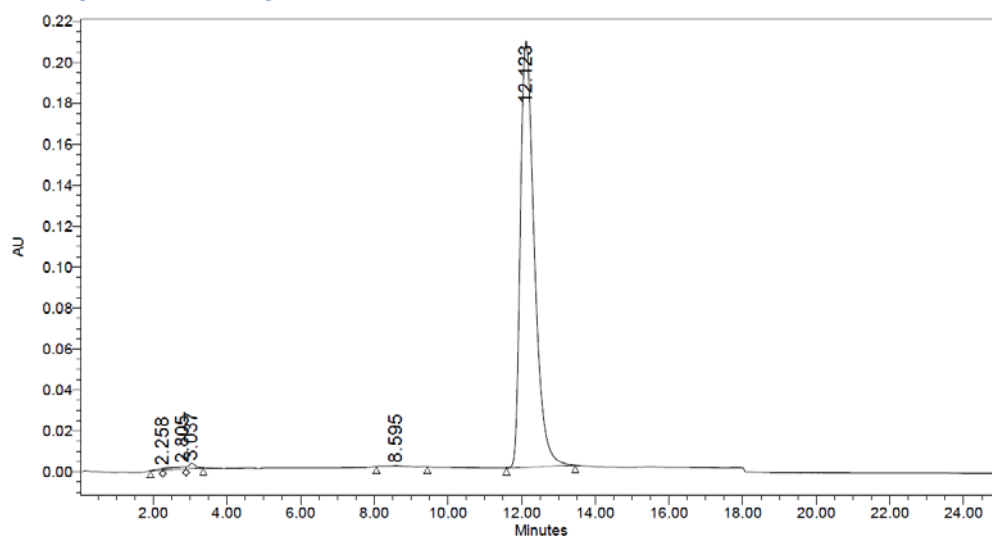
D-Panthenol is the provitamin of D-Pantothenic acid (Vitamin B5), which plays a key role in the human intermediary metabolism. Deficiency of Vitamin B5 can result in many dermatological disorders. D-Panthenol is applied in pharmaceutical industry and almost all type of cosmetic preparations. It cares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

Skin care	Deep penetrating moisturizer / Stimulates epithelization / Wound healing / Anti-inflammatory
Hair care	Long lasting moisturizer / Prevents hair damage / Thickens hair / Improves luster and sheen
Nail care	Improves hydration / Imparts flexibility

Dosage Recommendation

0.5%~2.5%	in shampoo and conditioner
0.05%~0.25%	in retain conditioner and shaping shampoo
0.05%~0.25	in spray
0.15%~0.25%	in hair lacquers
0.25%~0.5%	in hair cream

Analysis of Assay (HPLC)



Storage Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
Protect from humidity. Store at room temperature.

Shelf Life 2 years