

## Product Specification

### dl-Panthenol

General Information	
<b>Products name</b>	dl-Panthenol
<b>INCI</b>	Panthenol
<b>Cas No</b>	16485-10-2
<b>Appearance</b>	White crystalline powder
<b>Solubility</b>	Soluble in water
<b>Typical usage rate</b>	1-5%
<b>Standard</b>	GMP, Kosher, HALAL, ISO9001, HACCP
ADDITIONAL INFORMATION	
<b>Product Description</b>	D,L-Panthenol, aka Pro-Vitamin B5, is a stable racemic mixture of D-Panthenol and L-Panthenol. The human body readily absorbs DL-Panthenol through the skin and it rapidly converts D-Panthenol to Pantothenic Acid (Vitamin B5), a natural constituent of healthy hair and a substance present in all living cells. When it comes to moisturization properties- improved hydration, reducing water loss and maintaining skin elasticity and softness- this racemic mixture is 100% active. When applied for skin epithelization (wound healing), only D-Panthenol is converted to Vitamin B5 and not the L-Panthenol, so D,L-Panthenol has only half of the physiological activity of D-Panthenol.
<b>Benefits</b>	Studies have shown D-Panthenol promotes stimulation of epithelization, granulation, mitigation of itching and has an anti-inflammatory effect. When used in formulations over the course of three to four weeks, it has the potential to improve the appearance of the skin, including dryness, roughness, scaling, pruritus and erythema.
<b>Applications</b>	<ul style="list-style-type: none"> <li>• Shampoo and Conditioning Bar with Varisoft EQ 65</li> <li>• DIY Hydrating B5 Gel</li> <li>• Exfoliating Body Conditioner</li> <li>• Hydrating Resveratrol &amp; Niacinamide Facial Moisturizer</li> <li>• Moisturizing Lotion with Simulgreen 18-2</li> <li>• Soothing and Moisturizing Lotion with Montanov 68</li> <li>• Silky Hydrating Lotion with Babassu</li> </ul>

	<ul style="list-style-type: none"><li>• Hydrating &amp; Conditioning Gel Serum</li><li>• Protecting &amp; Moisturizing Facial Serum</li><li>• Simple &amp; Luxurious Hair Conditioner</li><li>• Time Defy Facial Serum</li><li>• DIY C&amp;E with Ferulic Acid</li><li>• Skin Soothing Toner</li><li>• Soothing &amp; Clarifying Serum</li></ul>
<b>Formulation Guide</b>	<p>1-5% in skin care, with the higher end of the range for more therapeutic applications.</p> <p>0.75-1% for shampoos and conditioners, 0.5-0.75% for hair styling products. 1% for nail care.</p>
<b>Packaging</b>	<p>25kg / drum; paper drum, 5kg / PE-bag; 1kg / PE-bag Inner-Packaging filled in PE-bag, filled in second PE bag PE Bags: food grade</p>
<b>Shelf life</b>	<p>2 years when properly stored Store at room temperature or lower, keep tightly closed, protect from light, humidity and insects</p>