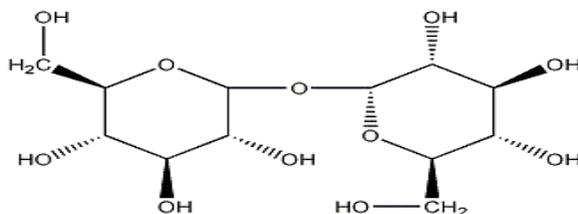


PRODUCT DATA

Evermoist™ Trehalose (Cosmetics Grade)

Aug 2018

Trade Name:	Evermoist™ Trehalose
INCI Name:	Trehalose
Chemical Name:	α -D-glucopyranosyl α -D-glucopyranoside
CAS No.:	99-20-7
EC No.:	202-739-6
Chemical Formula:	$C_{12}H_{22}O_{11} \cdot 2H_2O$
Chemical Structure:	



Typical Properties:

Appearance (25°C)	White crystalline powder
Color in solution	0.10 Max.
Assay (Dry Basis, %)	98.0 Min.
pH	5.0-6.7
Loss on drying (%)	0.1 Max.
Residue on ignition (%)	0.1 Max.
Turbidity	0.05 Max.

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Introduction:

Evermoist™ Trehalose is a nonreducing sugar formed by a $\alpha,\alpha,1,1$ -glucosidic bond between two α -glucose units. The bonding makes trehalose very resistant to acid hydrolysis, and therefore is stable in solution at high temperatures, even under acidic conditions.

- The molecular weight is small, making it easy to be absorbed by the skin. Trehalose enters the cells, plays its unique role of water-alternative stress factor and the protection of membrane function, which improves cell dry resistance, freezing resistance and adaptive ability to the environment.
- Evermoist™ Trehalose has excellent water retention and hygroscopicity, when the skin is severe dehydration, trehalose can replace the role of water in cells. When trehalose is used together with hyaluronic acid, synergistic interaction can be achieved, which makes it have intelligent moisturizing effect, and always maintains biological activity.
- Radiation resistant: Evermoist™ Trehalose can scavenge free radicals effectively to prevent cell mutations. It can effectively protect cells against the damage caused by radiation.

Formula superiority:

- Reduce the freezing point: Evermoist™ Trehalose can reduce the freezing point of aqueous phase, which greatly improves the product stability at low temperature.
- To prevent oil decomposition: For products containing fatty acids and esters, the addition of trehalose can effectively inhibit the oxidative rancidity of the product.
- To prevent the protein denaturation and keep the efficacy of proteins and peptides: For some substances which are unable to keep the biochemical activity at room temperature or for a long time, Evermoist™ Trehalose can keep them maintain good activity.

Applications: It can be widely used in personal care products, such as emulsion, masks, spray, moisturizing essence, water, gel, sunscreen, sunburnt repair, foundation, isolation, lotions, hair conditioner, shampoo, etc. It can also be used for lipstick, oral detergents and other products as a sweetener.

Recommended use level: 1-10 %.

Storage: Store at a sealed, cool and dry place, avoid direct sunlight.

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Package: 20 kg /drum.

Re-test date: 30 months from date of manufacture (Tentative).

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