SOLBIOTE[™]

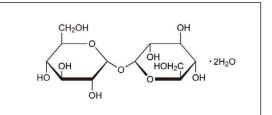
Injectable Grade of Trehalose

General

Trehalose is a dihydrous crystalline and non-reducing disaccharide consisting of two glucose molecules linked by an α , α -1,1 bond.

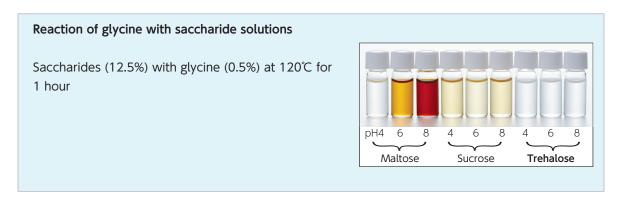
TREHALOSE SG is monographed as being low endotoxin and is intended mainly for injection. Because of its stability it can be autoclave or filter sterilized.

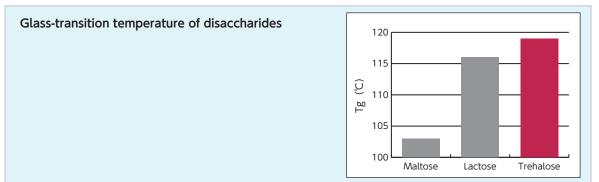
Chemical formula: $C_{12}H_{22}O_{11} \cdot 2H_2O$ Molecular weight: 378.33 CAS RN[®] : 6138-23-4



Properties

- Protects the quality of products during processing due to its non-reactivity. TREHALOSE SG does not participate in the Maillard reaction, preventing the development of undesired colors, odors and flavors.
- Heat and acid resistant (pH 2 and 100°C for 24 hours)
- Stable amorphous phase under high temperature due to its high glass-transition temperature (Tg:approximately 120°C). TREHALOSE SG can be used as a stabilizer for biomaterials due to its protective effect against environmental temperature variations.

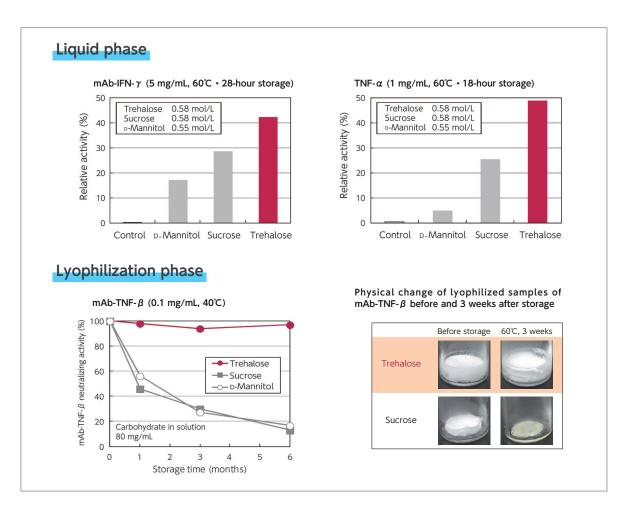




Stabilization of biomaterials

SOLBIOTE[™]

- Proteins can be denaturized by stressors such as heat, shear, and phase change during processing or storage. TREHALOSE SG can replace the water molecules that is closely associated with proteins, stabilizing the higher-order structure to prevent denaturation, especially during heating, freezing or lyophilization.
- TREHALOSE SG modifies ice crystal development to reduce damage to cells and proteins during freezing.



Packaging

20 kg (PE bag in plastic container or carton box) 1 kg (PE bag in carton box)

MANUFACTURER : Nagase Viita Co., Ltd. CONTACT : Nagase & Co., Ltd.

Life & Healthcare Products Department E-mail: dnfct@ex.nagase.co.jp

_ /////

A The information provided herein is intended only for reference purposes. It is the customer's responsibility to determine that the ingredients meet all legal requirements in the country where they are used, and that they do not infringe on any third party patents. Unauthorized reproduction of this brochure is prohibited.

