

品名: **海藻糖**

HS编码: 2940009090

CAS编码: 6138-23-4

Product Name: **Trehalose**

HS code:2940009000

CAS code:6138-23-4

海藻糖介绍:

海藻糖是一种安全可靠的天然糖, 它对各种生物活性物质具有神奇的保护作用。在恶劣的环境条件下, 海藻糖能在细胞表面形成独特的保护膜。因此, 许多表现出超常抗压能力的物种与它们体内存在大量的海藻糖有关。海藻糖被广泛地应用于食品和化妆品行业, 使人类保持健康和愉快的生活! 汇洋的海藻糖是在玉米淀粉的基础上采用自然工艺(发酵)制成。

Brief Introduction to Trehalose:

Trehalose is a kind of safe and reliable natural sugar, which has a magical protective effect on a variety of bio-active substances. Trehalose can form a unique protective film on the cell surface under harsh environmental conditions. So that many of the species that show extraordinary stress tolerance related to the presence of a large amount of Trehalose in their bodies. Trehalose is widely applied in the food and cosmetic industries to keep humans healthy and enjoyable! Trehalose of HUIYANG is made on the basis of corn starch using a natural process (fermentation).



anja@bio-fuyang.com



Trehalose





德州汇洋生物科技有限公司
DEZHOU HUIYANG BIOTECHNOLOGY CO.,LTD
电话: 0534-2169858 电话: 0534- 2169865

Certificate of Analysis
检验报告

CAS No.: 6138-23-4

品名 Product	结晶海藻糖 Trehalose	执行标准 Carried standard	GB/T23529-2009	包装规格 Pack size	100g
生产批号 batch number	20220429	生产日期 Production date	2022.04.29	有效期 Term of validity	30个月 30 months
检测项目及结果Test items and results					
检测项目 Test Items	检测方法 test method	标准要求 Standard requirements	检测结果 detection result	判定 determine	
感官 Sensory test	GB/T23529	白色干燥松散晶粒或结晶粉末, 无肉眼可见异物、味甜无异味。 White dry loose grain or crystalline powder, no visible foreign body, sweet taste, no peculiar smell.	符合 Conform	合格 qualified	
含量Assay/%	GB/T23529	≥99.0	99.43	合格Qualified	
PH	GB/T23529	5.0-6.7	6.5	合格Qualified	
灼烧残渣/%ignition residue	GB/T23529	≤0.02	0	合格Qualified	
干燥失重/% Loss on drying	GB/T23529	≤1.0	0.10%	合格Qualified	
色度Chromaticity	GB/T23529	≤0.100	0	合格Qualified	
浊度Turbidity	GB/T23529	≤0.05	0	合格Qualified	
比旋光度Specific rotation	中国药典	+197~+201	+199	合格Qualified	
霉菌和酵母菌 Mold and yeast CFU/g	GB4789.15	≤100	<100	合格 Qualified	
菌落总数 Totalplatecount CFU/g	GB4789.2	≤100	<100	合格Qualified	
大肠菌群MPN/100g Coliforms	GB4789.3	不得检出Negative	未检出Negative	合格Qualified	
沙门氏菌Salmonella	GB4789.4	不得检出Negative	未检出Negative	合格Qualified	
铅Pb/mg/kg	GB5009.12	≤0.5	<0.1	合格Qualified	
铁Fe/mg/kg	GB/T8967	≤5	<5	合格Qualified	
汞Hg/mg/kg	GB5009.17	≤0.01	未检出Negative	合格Qualified	
镉Cr/mg/kg	GB5009.123	≤0.1	未检出Negative	合格Qualified	
砷As/mg/kg	GB5009.11	≤0.5	<0.1	合格Qualified	
存储条件Storage conditions	成品应贮于干燥通风、清洁的库房中, 离墙离地存放以防受潮。 The finished products should be stored in a dry, ventilated and clean warehouse, away from the wall and the ground to prevent moisture				
净含量Net weight	√合格 Up to the standard		□不合格 Below standard		
包装Package	合格 Up to the standard		□不合格 Below standard		
结论Conclusion	合格 conform				



Kaixin Certification (Beijing) Co.,Ltd.
Certificate of Registration

Registration No. : 069HACCP2100038

This is to certify that

Dezhou Huiyang Bio-technology Co., Ltd.

Unified Social Credit Code:9137142606296370X1

Address: East Zone, Pingyuan Economic Development Zone, Shandong Province, China.

The management system is in conformity with
GB/T27341-2009 Hazard Analysis and Critical Control Point (HACCP) System-
General Requirements for Food Processing Plant
GB14881-2013 National Food Safety Standard General Hygienic Regulation for
Food Production
Hazard Analysis and Critical Control Point (HACCP System)
Supplementary Requirements of Certification 1.0
**Scope: Production of Trehalose Located in Starch sugar
production workshop of East Zone, Pingyuan
Economic Development Zone, Shandong Province**

Issue Date : 2021-02-24

Term of Validity : 2024-02-23

NOTE: The certified organization must accept the surveillance audit duly, and the audit shall be approved as effective before approving that this certificate can maintain as valid. On and by 2022-02-25, this certificate shall be used together with notice of maintaining certification and registration.



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C069-M

本证书的有效性依赖于获证组织接受本机构的监督审核, 并接受本机构的监督审核, 本证书的有效性依赖于获证组织接受本机构的监督审核, 并接受本机构的监督审核。
This certificate is valid only if the certified organization accepts the surveillance audit of this institution and the audit is approved as effective before approving that this certificate can maintain as valid. On and by 2022-02-25, this certificate shall be used together with notice of maintaining certification and registration.
中国北京中诚信国际认证有限公司(中诚信) 上海浦东世纪大道1500207号 服务热线: 400 616 1188 电话: +8610-6555 5910/1121/13 传真: +8610-6551 1889
Address: Suite 300, Zhongcheng Building, Zhongcheng West Street #2, Dongcheng District, Beijing, 100027 China Service hotline: 400 616 1188 Tel: +8610-6555 5910/1121/13 Fax: +8610-6551 1889

CERTIFICATE OF REGISTRATION

Application of Trehalose in the cosmetic industry



Cosmetic Product:

海藻糖补水保湿面膜

Trehalose Hydration Mask

Specifications: 25g/tablet

The main ingredients:

Trehalose, Hyaluronic acid, Hiacinamide, White foxglove root extract, vitamin E, etc.

The main effect:

deep hydration, improve dryness, brighten the skin tone

Application of Trehalose in the cosmetic industry



Cosmetic Product:

海藻糖润颜焕肤面霜 Trehalose
Moisturising and revitalising face cream

Brand: 杰肤泉JIEFUQUAN

Specifications: 50g

Suitable user: The gentleman

Application of Trehalose in the cosmetic industry



Cosmetic Product:

海藻糖修复爽肤水

Trehalose Restorative Toner

(TRUE WATER LIGHT EMULSION)

Brand: 薏芙 THANK YOU FARMER

Specifications: 155ml

Suitable skin type: oily skin

Application of Trehalose in the cosmetic industry



Cosmetic Product:

维生素B5海藻糖保湿面膜

B5 and Trehalose Moisturizing Mask

Brand: 百植萃Biophyto genesis

Specifications: 28ml/tablet

欣奕
SAYES

II 类医疗器械

即时舒缓 高效修护

- ✓ 保湿舒敏
- ✓ 强韧屏障
- ✓ 促进愈合

敷乐优[®]
皮肤屏障海藻糖凝胶辅料
规格: 30g

国家 II 类医疗器械: 津械注准 20192140160

Cosmetic Product:

敷乐优 皮肤屏障海藻糖凝胶辅料
Skin Barrier Trehalose Gel

Brand: 辛奕SAYES

Specifications: 30g

The main effect:

- Moisturising and soothing the skin.
- Strengthens the facial barrier.
- Promotes healing.

Application of Trehalose in the cosmetic industry



Cosmetic Product:
敷乐优 皮肤屏障海藻糖喷雾辅料
Skin Barrier Trehalose Spray

Brand: 辛奕SAYES

Specifications: 100g

The main effect:

- Soothes irritation.
- Repairs skin barrier.
- Improves dryness, redness and itchiness

Application of Trehalose in the cosmetic industry



Cosmetic Product:
海藻糖修护水
Trehalose Repairing Lotion

Brand: 微芙尔WISEFLOWER

Specifications: 100ml

The main effect:
Hydration against sensitive skin
Safe and gentle for the skin

Application of Trehalose in the cosmetic industry



Cosmetic Product:
海藻糖水库面膜
Skin Barrier Trehalose Gel Excipients

Brand: Anrris

Specifications: 25g/tablet

The main effect:

- Moisturising and soothing the skin.
- Hydrated skin restored to baby condition

Application of Trehalose in the cosmetic industry

蓝玉米海藻糖亮肤面膜

NET: 100g 3.52fl.oz

清理“肌肤垃圾”帮助肌肤排除深层污垢、杂质、毒素、化妆品残留物存留在肌肤内的细胞代谢废物，疏通细胞通道，加倍提高肌肤吸收养分的能力，令面膜中的有效成分发挥功效。



Cosmetic Product:

归田园蓝玉米海藻糖亮肤面膜

Blue Corn Trehalose Brightening Mask

Specifications: 100g

The main effect:

- Skin purifying and lightening.
- Clean up pores.
- Brighten skin color.

Application of Trehalose in food industry

The Seasoning Effect of Trehalose

Item	Odour	Stronger or weaker	Item	Odour	Stronger or weaker	Item	Odour	Stronger or weaker			
Salt solution Soy sauce Seaweed sauce	salty	stronger	Cocoa Natto Aojiru Potassium chloride Amino acids Valine Leucine Isoleucine arginine	Bitter flavor	weaker	Collagen Egg products Soybean protein Meat Fish	Distinctive smell	weaker			
Vinegar	sour	weaker									
Lemonade		stronger									
Perilla		stronger									
Bittern	astringent	weaker				Retort pouch	Metallic flavor	weaker	High sweetness sweetener	aftertaste	weaker
Vegetable	Grass stank								Irony	Iron taste	
Laminaria soup	Fishy								Curry Mustard	Piquancy	stronger
Soymilk	Fishy	stronger	Tap water	Bleach smell	weaker	Rice Rice products	Rice bran smell	weaker			
Soup-stock Powder	Umami										

Application of Trehalose in food industry

	Function	Examples
Pastry	Inhibition of starch retrogradation (inhibition of hardening, maintain the Translucence)	Dumpling, Tai Fook Cake, Mistletoe cake, Fern cake, Ohagi, Wobbly mochi
	Lower the sweetness (lower sweetness, increase brix)	Dumpling, skin of Tai Fook Cake, bean paste, Ohagi, fresh cream, Japanese material of cold pastry
	Increase freezing tolerance (Inhibition of freezing deterioration, Inhibition of ice crystal formation, maintain shape retention)	Frozen Japanese and Western style cakes
	Inhibition of water loss (Improve water retention)	Bean paste, Mizuyokan, fresh cream
	Improve taste, prevent moisture absorption (Maintain crispness)	Fruits, pies, sweet natto, Powdered sugar on doughnuts, biscuits
	Prevent over coloring	Bean paste, fresh cream
	Prevent sugar crystallization	Mutton soup, poundcake
	Improve bubble stabilization (replace emulsifier)	Sponge cake, Chiffon Cake, protein powder
	Inhibition of rancidity odor of oil	Frozen cake, Almond cream cake, pie
	Maintain freshness	Fruits used for frozen, cold cakes
	Adjust water content	pastry
	Reduce the bad smell after heating	Chocolate, cocoa beans

Application of Trehalose in food industry

	Function	Examples
Candy Bread	Lower sweetness· improve taste	Candy, cream filling, biscuit, jelly drops, tea bread, honey cake
	Prevent over coloring	White bread, biscuit
	Prevent moisture absorption (Prevent moisture regain)	Candy, dry jelly, Bean snacks, Fondant, sugar icing
	Improve taste (Maintain crispness)	Candy, biscuit, nut sugar coating
	Maintain taste (Inhibition of retrogradation)	Rice flour bread, sandwich
	Increase freezing tolerance	Semi finished frozen bread, steamed stuffed bun
	Improve bubble stabilization (replace emulsifier)	Toast
Cold drinks Desserts	Lower sweetness· improve taste	Ice-cream, pudding, jelly, mousse
	Inhibition of protein denaturation	Pudding, jelly, mousse
	Inhibition of water loss	Frozen pudding, jelly
	Inhibits ice crystal growth	Sorbet
	Improve milk taste (Reduce the bad smell after heating)	Kadas stuffing, milk pudding
	Maintain shape retention	Jelly, mousse
	Prevent moisture absorption	Fruit chips
Beverage	Low colorability	Amino acid beverage, Fruit and vegetable juice, hot drinks
	Low sweetness	beverages
	Improve flavor (Add flavor)	Beverage contains lemonade and milk
	Improve flavor (masking effect)	Beverage contains iron, soy milk, vinegar drink, amino acid beverage, Fruit and vegetable juice, mineral drinks, tea drinks
	Increase solubility	Beverage containing calcium and polyphenols
	Maintain antioxidant activity, prevent β Carotene deterioration	Fruit and vegetable juice
	Increase endurance	Powerade, fashion drinks
	Reduce the bad smell after heating	Coffee milk, milk tea, cocoa, fruit juice

Application of Trehalose in food industry

	Function	Examples
Food made of flour	Inhibition of starch retrogradation	Udon noodles, dumpling wrapper, Lamian Noodles
	Prevent noodles from clumping	Udon noodles, Lamian Noodles, noodles, Italian noodles
	Prevent noodles from being too soft	Udon noodles, Lamian Noodles, noodles, Italian noodles
	Prevent being too dry	dumpling wrapper, shao-mai wrapper, raw noodles
	Shorten the noodles cooking time	Udon noodles, Lamian Noodles, noodles, soba noodles
Flavoring	Add flavor	Japanese style noodle sauce, powder flavoring, mustard, tomato sauce
	Prevent moisture absorption	powder flavoring
	Inhibition of protein denaturation (reduce scum)	Seasoning for meat
	Inhibition of starch retrogradation	Liquid seasoning containing starch
	Increase freezing tolerance	Sauce, Mayonnaise Sauce, Salad Sauce, Sushi vinegar
	Odor control	Liquid seasoning
	Prevent over coloring	Liquid seasoning, Cream Sauce
Aquatic products processing	Increase the solidity (extend shelf life, prevent water loss)	Liquid seasoning
	Inhibition of protein denaturation	Frozen Surimi, Fried fish rice
	Inhibition of starch retrogradation	Surimi with starch
	Inhibition of moisture absorption and dehumidification	Seaweed, dried shellfish (e.g. shredded squid), Kelp products, Dried fish with sweet wine
	Improve flavor	Boiled seafood, Frozen Surimi, shredded squid
	Improve taste (Elastic, Crisp)	Fish cake, crab sticks, Chikuwa, shredded squid, Jam products
	Prevent browning	shredded squid, dried fish, Snout fish
	Reduce fishy smell	Crab, tuna, Saury, spotted mackerel, horse mackerel
	Reduce Odor (masking effect)	Aquatic products
	Prevent disintegration	braised fish in soy sauce
Increase freezing tolerance	fish fillet (Processed products)	

Application of Trehalose in food industry

	Function	Examples
agrotechny	Cover up odor	Fried eggs, frozen Bento, pickles
	Maintain freshness	Salad, pre-cut vegetables
	Improving sweet taste quality	Jam, Stewed chestnuts with mannitol, boiled beans, pickles
	Increase freezing tolerance	Tofu, fruits, croquette, Japanese pancakes
	Maintain original color	Dried vegetables, nardostachys, Vegetables in clear soup
	Prevent browning	Pre-cut fruits
	Improve reducibility in hot water	Dry goods
	Prevent form collapse during stewing	Stewed taro, Stewed pork with potatoes, chikuzen ni
Animal meat processing	Cover up odor	Meat (beef, chicken, pork)
	Increase freezing tolerance	fried pork chop, other processed meat products
	Improve water retention (Prevent the loss of gravy)	Hamburger Steak, Ham, beef steak, Japanese fried chicken
	reduce scum	Hot-pot, red stew
	Improve taste (crispness, softness)	Japanese roast chicken,
Other	Increase stability	Excipient of tablet, Powder perfume
	Promote plant growth	Fertilizer, pants nutrient solution
	Keep sugar content of fruits and vegetables	Fertilizer, pants nutrient solution
	Improve survival rate and promote growth	Fish culture bait, insect bait, shellfish
	Improve meat and milk quality	Feed