

## **Makendi Whey Permeate**

## **DESCRIPTION:**

Whey Permeate is a free flowing bulking agent, which dissolves fast. It has a high wettability and flows easily, making it ideal for use in applications such as instant soups, sauces, powder beverages, and seasoning. Whey Permeate contains at least 85% lactose – this is the reason for its mild, appealing flavour. Whey Permeate has a sweet dairy flavour, making it ideal for applications such as chocolate and confectionary. Since it does not have the salty mineral flavour typical of other permeate products, it ensures optimum usage at a much higher dosage. Whey Permeate can easily replace other, more expensive filler ingredients, such as pure lactose, whey powder, and others. Whey Permeate is a cost-efficient dairy replacer for lactose, sweet whey powder, and/or demineralised whey powder in many food applications.

**PACKING:** 25 KG paper bags / 1000 kg big bags.

**SHELF LIFE:** Minimum 12 months if stored in closed bags under cool and dry conditions.

## **SPECIFICATIONS:**

Parameter	Specifications
Protein (Nx6.38) as is	max. 3%
Lactose monohydrate	min. 85%
Ash	max. 7%
Moisture	max. 3.5%
Total plate count	max. 10000/g
Enterobacteriaceae	max. 10/g
Staphylococcus aureus coagulase +	absent in 1 g
Yeast/Mould	max. 100/g
Salmonella	absent in 125 g



pH (10% solution)	5.8-6.5
Bulk density	level 0.7-0.8 g/cm <sup>3</sup>
Colour	pale yellow
Flavour/odour	bland, slightly salty

## **APPLICATIONS:**

- Chocolate and Confectionary: Provides mild sweetness and a pleasant milky flavour. Acts as a flavour enhancer due to mineral content. Can be used at high concentration, providing more dairy bulking solid without excess sweetness.
- Dairy: Whey Permeate is a natural dairy ingredient, ensuring a clean label. Especially useful where higher non-protein and non-fat solids are desired to add volume to powder. Acts as a flavour enhancer to other added flavours, like chocolate and vanilla.
- Instant soups and sauces: Adds volume to powder products and blends well with other ingredients, acting as an enhancer for other flavours and spices. Binds volatile flavour components, resulting in less flavour loss during processing and storage. Very efficient browning agent, providing colour and burn sugar notes.
- Seasoning and snacks: Adds volume to seasoning mix, which raises consumer appeal through highly visible seasoning. Enhances other dairy solids such as cheese or cream powder, yielding a milky flavour. Blends well with other ingredients in the seasoning and results in good adherence of the blend to, e.g. chips.
- Vending mix and powder beverages: Acts as a dairy filler and sweet bulking agent, adding volume to powder. Adds sweet, milky flavours to the beverage. Provides a pleasant mouthfeel to drinks due to the mineral content, especially calcium.
- Bakery: Whey Permeate contributes to the maillard reaction and caramelisation during baking, resulting in enhanced browning of the crust and contributing to toasted brown and burnt sugar notes. Provides a milky, sweet flavour to bread, cakes and cookies and acts as a flavour enhancer in custards, fillings and icing.