

SIMPLESSE[®] 100 WHEY PROTEIN

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Description	SIMPLESSE 100 is a microparticulated whey protein concentrate (53% protein). SIMPLESSE 100 is free-flowing, white- to cream-colored powder, suitable for use as a texturizing agent and/or fat extender in food preparations.
Features	<ul style="list-style-type: none"> • promotes smoothness and creaminess • softens structure and provides tenderness • stabilizes emulsions • contributes opacity • stabilizes foams • inhibits ice crystal growth • binds and distributes water • helps balance flavors • can reduce fat and calories • improves melt resistance • provides heat stability • helps retain moisture • fortifies protein levels • conditions doughs naturally
Typical Applications	<ul style="list-style-type: none"> • ice cream and frozen desserts • dressings, sauces, soups • baked goods (cakes, muffins, brownies) • natural and processed cheeses • margarines and spreads • retorted nutritional drinks • cheesecake • coffee creamers • sweet doughs
Typical Use Level	0.5 – 4%
Dispersion/Hydration	SIMPLESSE 100 microparticulated whey protein concentrate disperses easily and hydrates rapidly in most applications without the need for special equipment or processing. The SIMPLESSE 100 powder should be incorporated into the product when there is sufficient water available, preferably when the total solids are less than 40%. In fat-based systems, SIMPLESSE 100 powder should be hydrated in the aqueous phase before the addition of fat or oil; however, there is no problem in achieving full reconstitution in dilute fat emulsions such as whole milk or even cream.
Standard Packaging	Packed in 17-kg multiwalled poly-lined kraft paper bags. All packaging material complies with relevant UK, EU and US food contact legislation.
Ingredient/Labeling	SIMPLESSE 100 whey protein Microparticulated whey protein concentrate 53%, CAS: 91082-88-1 Kosher dairy approved
Regulatory Information	SIMPLESSE 100 meets the definition of whey protein concentrate in the current edition of the United States Dried Milk Ordinance and has been affirmed GRAS at 21 CFR § 184.1979c. Ingredients meet the requirement of the food labeling directive 2001/13/EC, according to which ‘whey protein concentrate’ shall be described on the list of ingredients on the food label. The ingredient(s) of this product is exempt from TSCA Chemical Substances Inventory, Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL), European Inventory of Existing Commercial Chemical Substances (EINECS), Japanese Inventory (ENCS).
Storage Conditions/ Shelf Life	Containers should be kept closed and stored in a cool, dry place. Functional properties of the product are guaranteed to conform with the stated sales specifications for 548 days from the date of manufacture when stored under these conditions. Product quality should be re-evaluated prior to use if this “Best Before” date has been exceeded.
Quality System	Manufactured under a quality system that ensures compliance to applicable food safety standards.

Specifications

<u>Property</u>	<u>Requirement</u>	<u>Test Method</u>
Particle Size - 40 mesh (420 µm)	U.S.S. Standard Screen Scale Not less than 98.0% through	AP 3140
Loss On Drying	1.0 – 4.0%	AP 3010
Scorched Particles	Not more than 7.5 mg, disc A	AP 4052
Fat Content (dry basis)	1.0 – 4.5%	AP 3080
Protein (dry basis)	51.5 – 55.5%	AP 3091
Ash (dry basis)	2 – 8%	AP 3160
Bacteria *		QCM 1000-5
- 5 days	Not more than 10,000 cfu/g	
Yeast & Mold	Not more than 10 cfu/g	QCM 1000-5
Coliform	Not more than 20 cfu/g by Most Probable Number (MPN)	QCM 1000-5 or QCM 2021
<i>Salmonella</i> spp.	Absent in 750 g	QCM 2010
<i>Listeria monocytogenes</i>	Absent in 25 g	QCM 2015

* Total viable mesophilic aerobic count

METHODS OF TESTING (Full details of test methods are available upon request)

Particle Size (AP 3140), Scorched Particles (AP 4052), Fat Content (AP 3080), Protein (AP 3091), Ash (AP 3160)

Use standard methods as defined by AOAC or the International Dairy Federation.

Loss on Drying (AP 3010)

Dry 2 g product in a standard vacuum oven at 65°C and 60 cm Hg for 16 hours. Cool in a desiccator and reweigh.

Bacteria, Yeast & Mold (QCM 1000-5), Coliform (QCM 1000-5/QCM2021), *Salmonella* spp. (QCM 2010), *Listeria monocytogenes* (QCM 2015)

Use standard methods as given in the U.S. Food and Drug Administration's *Bacteriological Analytical Manual for Foods*, or as defined by the International Dairy Federation.

NOTE: CP Kelco reserves the right to use company test methodology.

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