

Fat-Free Sour Cream with WPI



Nutrition Content per 100 g

Calories	60 kcal
Total Fat	1g
Saturated Fat	0.5 g
Trans Fat	0 g
Cholesterol	5 mg
Total Carbohydrates	6 g
Dietary Fiber	0 g
Sugars	5 g
Protein	7 g
Calcium	96 mg
Magnesium	0 mg
Phosphorus	82 mg
Potassium	0 mg
Sodium	160 mg
Iron	0 mg
Vitamin A	166 IU
Vitamin C	0 mg

Ingredients	% Weight
Skimmed milk	64.25
Whole milk	30.00
Whey protein isolate (WPI)	3.44
Starch, waxy maize modified cook up	0.76
Dent modified instant starch	0.75
Sodium phosphate	0.27
Titanium dioxide	0.27
Culture	0.20
Sodium citrate	0.06

Procedure

1. Mix all dry ingredients together in a bowl.
2. Place skimmed and whole milk together in a pan, and disperse dry ingredients in milk, using a mixer.
3. Heat to 85°C (185°F), and hold for 30 minutes to pasteurize.
4. Homogenize at 70°C (158°F), using two stages: 13.8 MPa (2000 psi) in the first stage and 3.5 MPa (508 psi) in the second stage.
5. Cool to 21°C (70°F) and inoculate with culture.
6. Incubate at 24°C (75°F) approximately 18 hours, or until pH of 4.5 to 4.6 is reached.
7. Cool to 4°C (40°F) and store for at least 48 hours to allow starch to set up and full viscosity to be developed.