

Sweetened Condensed Milk Replacer



INGREDIENTS

	Usage Levels (%)
Sucrose	100.00
Water	96.80
Sweet whey powder	3.00
Vegetable fat, partially dehydrogenated	0.20
Calcium caseinate	
Sodium caseinate	100.00
Lecithin	45.95
Sodium bicarbonate	36.00
Total	100.00

NUTRITIONAL CONTENT

Per 100g	
Calories	310kcal
Total Fat	8g
Saturated Fat	1g
Trans Fat	0g
Cholesterol	0mg
Total Carbohydrates	55g
Dietary Fiber	0g
Sugars	55g
Protein	5g
Calcium	152mg
Magnesium	24mg
Phosphorus	132mg
Potassium	430mg
Sodium	230mg
Iron	0mg
Vitamin A	12IU
Vitamin C	0mg

PREPARATION

Procedure for Non-Homogenized Blend

- Melt vegetable fat and lecithin to 65-75°C (150-165°F).**
- Dry blend sweet whey powder, caseinates and sodium bicarbonate, and slowly add to the melted fat mixture at 65-75°C (150-165°F) under agitation to form a uniform mixture.**
- Blend sucrose slowly into melted fat/whey-caseinate mixture, and mix until uniform.**
- Add about one-third of the water with agitation, to form a thick, homogeneous paste. Continue stirring until sucrose is dissolved.**
- Slowly add the remaining water and continue stirring until mixture is smooth and creamy.**
- Cool to 15-18°C (60-65°F) and store for use.**


Sweetened Condensed Milk Replacer

PREPARATION

(continues)

Procedure for Homogenized Blend

1. **Melt vegetable fat and heat together with water and lecithin in a vat at 65-70°C (149-158°F).**
2. **Dry blend sucrose, sweet whey powder, caseinates and sodium bicarbonate, and slowly add fat/water mixture to the dry ingredients. Agitate to completely disperse dry and wet ingredients, mixing until uniform.**
3. **Raise temperature of the batch to 70°C (165°F).**
4. **Homogenize at 70°C (165°F) in a two-stage homogenizer with pressures of 17.2 MPa (2500 psi) on the first stage and 3.5 MPa (500 psi) on the second stage.**
5. **Cool to 15-18°C (60-65°F) and store for use.**

Rely on the dynamic lineup of U.S. dairy to meet consumer demands for global product development. The U.S. Dairy Export Council (USDEC) offers resources on ThinkUSAdairy.org including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product.  [@ThinkUSAdairy](https://twitter.com/ThinkUSAdairy)

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. Developed by Hugunin & Associates, USA. ©2014 U.S. Dairy Export Council.