

Sports Beverage



INGREDIENTS


	Baker's (%)	Usage Levels (%)
Water	347.45	76.53
Maltodextrin, 18DE	45.40	10.00
Fructose, crystalline	41.54	9.15
Whey protein concentrate, 80% protein (WPC 80)	16.34	3.60
Acid, citric, phosphoric or malic	2.54	0.56
Flavor	0.41	0.09
Sodium citrate dihydrate	0.27	0.06
Color	0.05	0.01
Total		100.00

NUTRITIONAL CONTENT

Per 100g	
Calories	90kcal
Total Fat	0g
Saturated Fat	0g
Trans Fat	0g
Cholesterol	5mg
Total Carbohydrates	19g
Dietary Fiber	0g
Sugars	10g
Protein	3g
Calcium	29mg
Magnesium	5mg
Phosphorus	7mg
Potassium	15mg
Sodium	25mg
Iron	0mg
Vitamin A	4IU
Vitamin C	0mg

PREPARATION

1. **Add water to large mixing tank at 15-25°C (59-77°F).**
2. **With good agitation, add WPC 80, avoiding entrapment of air. Allow mixture to sit for 15-30 minutes, so that WPC 80 can become hydrated.**
3. **Mix in fructose, maltodextrin and sodium citrate with good agitation.**
4. **Add flavor and color. Allow to hydrate for 10 minutes.**
5. **Adjust pH to 3.5-3.7 using a 50% solution of the appropriate acid while continuously mixing.**
6. **Each processor must determine the appropriate heating conditions to insure a safe product. Approximately 80-85°C (175-185°F) for 15-30 seconds should serve as a starting point for low pH beverages.**
7. **Hot-fill containers.**
8. **Cool beverages immediately.**

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 Proliant, Inc. Tested at the Wisconsin Center for Dairy Research, University of Wisconsin-Madison. ©2014 U.S. Dairy Export Council.