# **Bulgur, Soy-Fortified**

This processed commodity is generally used as a staple food for all categories of programs. Bulgur is cracked, debranned, and partially precooked to lower final cooking time, reduce toughness and some of the crude fiber.

# A. NUTRITIONAL VALUES (PER 100 g)

These are average values, taken from the U.S. Department of Agriculture, Agricultural Research Service (USDA:ARS) 1998 USDA Nutrient Database, Release 12, Laboratory Home Page, (http://www.nal.usda.gov/fnic/foodcomp). These nutrient values are provided as a guide for use in the calculation of food aid rations; users should be aware that shipments of food aid may vary from these exact values. The values for thiamin, riboflavin, niacin, vitamin A, calcium and iron represent the minimum levels of enrichment nutrients (converted to a 100 g basis) as listed in Specifications below.

### **B. COMPONENTS**

85% Bulgur	Milled from any classes of wheat
	defined in the "official grain

standard of the United States."

Cracked, debranned.

15% Soy grits Defatted, toasted, or expeller

processed.

#### C. SPECIFICATIONS

(See Table next page)

#### D. PACKAGING

50 kg (110.23 lb.) bags of woven polypropylene. This fabric contains an inhibitor to resist ultra-violet absorption along with an anti-skid coating.

#### E. SHELF LIFE

At least one year. See Section III: Storage/Shelf Life Specifications for more information.

Nutrient	Amount	Unit
Water	8.7	g
Energy	339.8	Kcal
Protein	18.2	g
Total Lipid	1.3	g
Carbohydrate	69.6	g
Fiber, total dietary	18.18	g
Ash	2.2	g
Calcium	110	mg
Iron	2.90	mg
Magnesium	182.90	mg
Phosphorus	356	mg
Potassium	706	mg
Sodium	17.5	mg
Zinc	2.0	mg
Copper	0.9	mg
Manganese	3.0	mg
Selenium	2	mcg
Vitamin C	0	mg
Thiamin	0.44	mg
Riboflavin	0.26	mg
Niacin	3.53	mg
Pantothenic acid	1.2	mg
Vitamin B-6	0.4	mg
Folate	150	mcg
Vitamin B-12	0	mcg
Vitamin A	2205.00	IU
Vitamin E	0.1	mg-ATE
Vitamin D	n/a	IU
Iodine	n/a	mcg

## CHEMICAL AND PHYSICAL REQUIREMENTS (FINISHED PRODUCT)

ITEM	REQUIREMENT <sup>1</sup>	
	Minimum	Maximum
Moisture, %		11.5
Protein (Nx6.25), % <sup>2</sup>	17.3	
Crude Fat <sup>2</sup>		2.6
Ash, % <sup>2</sup>		3
Crude Fiber, % <sup>2</sup>		2.6
Total Bacteria Count per gram		50,000
Foreign Material: Other grains except wheat and soy grits, <sup>9</sup>	%	0.10
Materials other than cereal grains or soy grits, % <sup>4</sup>		0.10
Scorched particles (whole kernels and/or		
pieces of kernels of wheat or soy), %		0.20
Ungelatinized wheat particles (whole kernels and/or		
pieces of kernels), %		0.9
Whole processed kernels remaining on		
U.S. Standard No. 8 woven-wire-cloth sieve, %		3.5
Material that will pass through U.S. Standard No. 8		
woven-wire-cloth sieve, %	81	
Material that will pass through U.S. Standard No. 14		
woven-wire-cloth sieve, %		23
Material that will pass through U.S. Standard No. 30		
woven-wire-cloth sieve, %		1.2

- 1. All percentages are on the basis of weight.
- 2. These limiting factors are on a moisture-free basis.
- 3. For maximum ash see table on "Maximum Ash Allowable Without Discount at Specified Calcium Levels" in USDA Specifications.
- 4. Including grain hulls either attached or detached. However, any hulls attached to product should be detached before inclusion in the hull fraction.

Source: USDA:FSA:PDD:EOB February 12, 1998. Contact 202-690-3565; BWSF7: PURCHASE OF BULGUR/SOY-FORTIFIED BULGUR FOR USE IN EXPORT PROGRAMS – SPECIFICATIONS