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TEXTURED SOY PROTEIN COMMODITY FACT SHEET

WBCSM Material Description and Number

SOY PROTEIN, TEXTURED BAG-50 LB 100618

General Information

Textured soy protein (TSP) is a processed food product manufactured from either soymeal flakes, soy flour, or soy protein concentrate. It can be uncolored or caramel color and contains at least 52 percent protein on a dry basis. Soybeans are used to make TSP are grown throughout the Midwest and are planted in the spring or early summer and harvested in the fall. For more information on nutrition, processing, packaging and shelf life, refer to the [U.S. Soybean Export Council \(http://ussec.org\)](#). TSP is typically packaged in a 50-pound, multi-wall pinch bottom open mouth (PBOM) or Webb bottom pinch top, polyethylene lined paper bag. It has a shelf life of two years. Adverse conditions such as high humidity and storage temperate do not greatly impact the shelf life; however, moisture under 10 percent and fat content under one percent can extend the shelf life of TSP. Nutrition quality of the product is good for several years; however, flavor changes can occur when stored at high temperatures and high humidity. Storage under 75 degrees F and 60 percent relative humidity is recommended. For full product specifications refer to the USDA Commodity Requirements Document for value added soy products.

Programming Guidance

- *Development:* In development settings, TSP can serve as a source of protein in general household rations where it is appropriate.
- TSP may also be used in cases of food insecurity with elevated nutritional needs for Vulnerable Group Feeding or in Food for Education programs.

Nutrition/Preparation Information

TSP is a good source of highly-digestible plant-based protein. The product is used as an ingredient in a variety of foods including meat products and in meat substitutes. It is packaged as a dry product that is fully cooked and can be easily rehydrated with tepid water before use. TSP can be used as an ingredient with ground meat for patties and sausage and in vegetarian foods and stews and rice based dishes. To prepare, soak TSP in ratio of 1 part soy protein with 1 part water and cook until heated through. For recipes refer to the [World Initiative for Soy in Human Health](#).

Nutritional Content

The nutrient table below includes average values, taken from the [U.S. Soybean Export Council](#).

Total (100g)	
Water (g)	9.00
Energy (kcal)	270.00
Protein (g)	52.00
Total Lipid (fat) (g)	4.00
Carbohydrate	30.00
Fiber, total dietary (g)	4.00

Sugars, total (g)	0.00
Minerals	
Calcium (mg)	320.00
Iron (mg Ferrous Fumerate)	
Iron (mg EDTA)	
Iron: total (mg)	10.00
Magnesium (mg)	300.00
Phosphorous (mg)	730.00
Potassium (mg)	2400.00
Sodium (mg)	15.00
Zinc (mg)	5.00
Vitamins	0.00
Vitamin C, total ascorbic acid (mg)	0.00
Thiamin (mg)	0.62
Riboflavin (mg)	0.31
Niacin (mg)	2.60
Vitamin B6 (mg)	0.50
Folate, DFE mg	0.30
Vitamin B12 mg	0.00
Vitamin A (µg)	0.00
Vitamin E (alpha-tocopherol) (mg)	0.00
Vitamin D (D3) (µg)	0.00
Vitamin K (phylloquinone) (µg)	0.00

USDA Commodity Requirements Document
http://www.fsa.usda.gov/Internet/FSA_File/vasp4.pdf

- Shelf Life/Best if Used By Date (BUBD)**
- Shelf Life - 12 months from packaging
 - BUBD - not available

Sources

Spectrum Commodities. 2016. World Production and Supply/Demand May 10, 2016. Retrieved September 30, 2016 from: <http://spectrumcommodities.com/wp-content/uploads/2016/05/Supply-Demand.pdf>

U.S. Soybean Export Council. 2012. **Buyer's Guide. U.S. Soy Export Council**. Retrieved on September 30, 2016 from:
<http://www.ussec.org/resources/buyers-guide/>

United States Department of Agriculture, Farm Services Agency. 2007. USDA Commodity Requirements. VASP4 Value Added Soy Products for Use in Export Programs. Retrieved September 30, 2016 from:
http://www.fsa.usda.gov/Internet/FSA_File/vasp4.pdf

Soyfoods Association of North America. 2016. **Textured Soy Protein**. Retrieved on September 30, 2016 from: <http://www.soyfoods.org/soy-products/soy-fact-sheets/textured-soy-protein-fact-sheet>

Webb, P., B. Rogers, I. Rosenberg, N. Schlossman, C. Wanke, J. Bagriansky, K. Sadler, Q. Johnson, J. Tilahun, A. Reese Masterson, A. Narayan. 2011. **Delivering Improved Nutrition: Recommendations for Changes to U.S. Food Aid Products and Programming**. Boston, MA: Tufts University. Retrieved on September 30, 2016 from: http://pdf.usaid.gov/pdf_docs/PNADZ842.pdf

World Initiative for Soy in Human Health. 2012. Soy Recipe Booklet: Soy Foods Cooking Workshop Hosted by the National Soybean Research Laboratory. Retrieved on September 30, 2016 from: <http://www.wishh.org/wp-content/uploads/2014/09/soy-recipes-booklet.pdf>