

Wm. Bolthouse Farms, Inc.
7200 East Brundage Lane • Bakersfield, CA 93307-3016
661/366-7205 • Fax: 661/366-2834

Thursday, January 25, 2007

Mr. Robert L. Pooler National Organic Standards Board USDA/AMS/TM/NOP Room 4008-So., Ag Stop 0268 1400 Independence Ave., SW. Washington, DC 20250

Re: National List Petition Submission for Carrot Fiber

Dear Mr. Pooler:

Wm. Bolthouse Farms, Inc. is petitioning carrot fiber, the dried edible dietary fiber of fresh carfets, for inclusion on the National List under Section 205.606.

Agricultural (non-organic) substances allowed in or on processed products labeled as "organic" or made with organic (specified ingredients)".

The carrot fiber is an agricultural based food ingredient that is derived from fresh non-organic carrots. The carrot fiber is a FDA approved GRAS (GRAS Notice No. GRN 000116) food additive that is currently used in processed sauces, baked goods, bakery mixes, processed meats and other food applications. The function of the ingredient is as a binder, thickener, extender and stabilizer at use levels necessary to perform its function, but not exceeding a 5% use level in the finished product.

The inclusion of the carrot fiber on the National List is being petitioned as there are no organic agricultural based food additive substitutes that are similar in functionality and commercially available for use in processed foods.

On the following pages please find the specific information as requested for this petition in 7 CFR Part 205. In addition the following attachments have been enclosed for your consideration.

Attachments:

- A) Product Specification Sheet (includes MSDS)
- B) GMO Statement
- C) FDA GRAS Letter
- D) USDA-FSIS Letter
- E) Manufacturing Process
- F) Comparative Functionality Data (CBI)
- G) Continuing Letter of Guarantee

Please let us know if there are any questions related to the carrot fiber or its applications in the food industry.

Sincerely,

Don Bailey

Wm. Bolthouse Farms, Inc. 7200 East Brundage Lane Bakersfield, CA 93307

HYDROBIND - Carrot Fiber
Patented (US Patent No. 6,645,546) and produced solely by Wm. Bolthouse Farms, Inc.
GRAS Notice No. GRN 000116

ITEM A

The food additive, carrot fiber, is being petitioned for inclusion on the National List under Section 205.606.

205.606 - Non-organically produced agricultural products allowed as ingredients in or on processed products labeled as "organic."

ITEM B

1. The common name for the ingredient is carrot fiber.

The additive, carrot fiber, is labeled as carrot fiber when used in nonstandard food products including pasta sauces, seasoning blends, and baked goods.

For for all processed meat and poultry products, the ingredient is labeled as "isolated carrot product" or "modified carrot product". See attachment D - USDA/FSIS Letter.

2. The ingredient, carrot fiber, was developed and is processed under patent (U.S. Patent No. 6,645,546) protection solely by Wm. Bolthouse Farms, Inc.

Wm. Bolthouse Farms, Inc. 7200 East Brundage Lane Bakersfield, CA 93307

Tel: 661-366-7209 Fax: 661-366-9236 www.bolthouse.com

- 3. The carrot fiber is used as a food additive at a use level not to exceed 5% in the finished products. The function of the carrot fiber is as a binder, thickener, stabilizer, extender in tomato based pasta sauces, processed meat and poultry seasoning blends, bakery blends for frozen and fresh baked goods, and dairy blends.
- **4.** The carrot fiber is a powdered food additive that is dry or wet blended into finished processed food products using conventional food processing equipment. The carrot fiber easily disperses in water based and fat based liquids with minimal agitation. The function of the carrot fiber in the finished food systems is as a binder, thickener, stabilizer and extender.
- 5. The carrot fiber is the dried soluble/insoluble dietary fiber derived from fresh non-organic carrots. Carrot fiber is manufactured from fresh carrots through a series of physical processes that renders a free flowing, bland tasting off-white powder. A further detailed description of the process can be found under attachment E.
- **6.** Carrot fiber was recently submitted for submission to the National List, letter dated January 16, 2007, however is being resubmitted to include the information as required in 7 CFR Part 205.
- 7. Carrot fiber is a GRAS approved food additive (GRAS Notice Number 000116). A copy of the GRAS Notice is enclosed as attachment C. The manufacturing of carrot fiber complies with all local, state and federal guidelines (see attachment G Continuing Guarantee).

- 8. Carrot fiber, does not have an assigned Chemical Abstract Number.
- **9.** Carrot fiber is the dried soluble and insoluble solids of fresh carrots. A copy of the specifications for carrot fiber is enclosed under Attachment A. Those specifications outline the approximate values for all the major components that make up the carrot fiber.

Likewise the carrot fiber acts to bind and or stabilize water and/or fat in food systems. The mechanism for the water/fat binding is a physical property of the carrot fiber brought about by its unique cellular structure. The water/fat is absorbed within the cellular structure of the fiber and remains within the food system through normal thermal processing resulting in improved texture, higher yields, increased stability and extended shelf life, depending on the particular application.

In addition there are no known adverse reactions in regards to carrot fiber and other substances, including soil, organisms, crops or livestock. This includes any adverse reactions to humans that ingest the fiber. To the contrary carrot fiber is an excellent source of natural dietary fiber (92% dietary fiber) that is needed in the diet to promote a healthy lifestyle.

- **10.** The MSDS for the carrot fiber is enclosed with this petition as part of Attachment A. Also, there is no information available from the National Institute of Environmental Health Studies regarding carrot fiber.
- 11. Carrot fiber is produced under patent protection solely by Wm. Bolthouse Farms. There are no other sources world wide for carrot fiber (non-organic or otherwise) as a functional food ingredient. In addition natural plant fibers, such as carrot fiber, are commonly used in processed food products as binders, thickeners, extenders and stabilizers. The addition of fibers, for their functional properties, improve the eating qualities of the finished products while reducing the total product costs to the manufacturer and consumer.

Furthermore, although there are substances on the National List, such as gums or carageenan, that will duplicate the functional properties of carrot fiber in some manner, they are either synthetic, are not organic or are not agricultural based. Finally according to our research there are no known commercially available sources of organic plant fiber based food additives that will duplicate the functional properties of carrot fiber in processed food products.

12. The inclusion of carrot fiber to the National List as a non-organically produced agricultural substance is based on the non-availability of an alternate organic agricultural substance. The justification for this position is as follows:

Carrot fiber is derived from the remnants of (non-organic) fresh carrots that are harvested and processed specifically for the retail fresh peeled carrot market. The invention of carrot fiber, as a food additive, was completed to fully utilize the carrot byproducts of the baby peeled carrot production process. Previous to the invention of the carrot fiber the byproduct from the baby-peeled carrot production process was sold as animal feed or was sent to an approved solid waste facility. Bolthouse Farms harvests and processes approximately 1000 tons of fresh (non-organic) carrots on a daily basis, for the production of fresh baby peeled carrots, for sale in the retail fresh produce industry. The invention and production of carrot fiber from the byproducts of the baby peel carrot manufacturing process eliminates the disposal of approximately 100 tons of carrot waste on a daily basis.

Furthermore the production of carrot fiber from an organic carrot source is not feasible. The current production facility for carrot fiber does not have access to a byproduct stream of organic carrots. Also, there is not an available organic carrot byproduct stream of sufficient quality, quantity or cost to support the production of carrot fiber as a commercial food ingredient.

ATTACHMENT A

Product Specifications, Composition and MSDS

For Carrot Fiber

7001 IM 20 D 1: 51

ORGANIC PROGRAM

(US Patent Approved)



NOMENCLATURE:

Carrot Fiber (SP)

DESCRIPTION:

Hydrobind™ Carrot Fiber is the fiber portion of the carrot that

is extracted, purified, dried and ground into an off-white free-

flowing powder.

APPEARANCE:

Color

Creamy white

Flavor and Odor

Bland and neutral

Granulation

Minimum 98% thru NIST 100 mesh

pH (1% solution)

 5.0 ± 1.0

Moisture

PROXIMATE:

ComponentTypical Percent*Total Dietary Fiber92.0% of dry solidsSoluble14.0% of dry solidsInsoluble78.0% of dry solidsAsh5.3% of dry solidsProtein3.0% of dry solidsFat0.4% of dry solids

*Because the product is derived from a natural source,

proximate values may vary.

BINDING CAPACITY:

Water, average of 18X its weight (by modified AACC 56-20)

Oil, average of 4X its weight (by modified AACC 56-20)

PHYSICAL DATA:

Screen analysis

98% thru NIST 100 mesh

Particle dimensions, typical

15 μm by 90 μm

10.0% maximum

BULK DENSITY:

306 g/L

STORAGE:

Protect from heat and moisture. Shelf life is one year or

more if stored dry at 68 °F (20 °C) or less.

Wm. Bolthouse Farms Inc., 7200 East Brundage Lane, Bakersfield, California 93307-3016 USA Phone: 661 366 7280 Fax: 661 366 9236 Web page: www.bolthouse.com

Effective Date: 5/16/05 Supersedes 2/17/05

Hydrobind Carrot Fiber

(US Patent Approved)



MICROBIOLOGY:

(Typical)

Total plate count Yeast and mold

Salmonella

Coliform

Escherichia coli

Aflatoxin

less than 500 cfu/g less than 50 cfu/g none detected in 25 g

none detected

none detected

none detected

HEAVY METALS:

(Typical)

Arsenic, As

Cadmium, Cd

Lead, Pb

Mercury, Hg

<1.0 ppm

<0.5 ppm <1.0 ppm

<0.1 ppm

PESTICIDE RESIDUE:

Chlorinated Hydrocarbons, typical

none detected

CUSTOMS:

Harmonized tariff number for carrot fiber is 0712.90.90.90

LABEL SUGGESTIONS: Hydrobind™ can be labeled as follows in non-standard food

products: carrot fiber, carrot isolate, vegetable fiber or

vegetable isolate.

For all processed meat & poultry products:

isolated carrot product or modified carrot product.

PACKAGING:

Multi-layer 12-kilo (26.45 lb.) polyethylene lined bags

Full 65-bag pallet holds 780 kilos (1720 lb.) net

Bulk bags and bulk tankers are available on request

REGULATORY:

GRAS (generally recognized as safe) as a food ingredient.

CERTIFICATIONS:

Kosher: Union of Orthodox Jewish Congregations

Halal: Islamic Services of America

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NUTRITIONAL ANALYSIS

<u>Nutrients</u>	<u>Per 100 g</u>
Total Carbohydrates	86.40 g
Total Dietary Fiber	86.00 g
Soluble	13.00 g
Insoluble	73.00 g
Sugars (Sucrose, Fructose, Giucose)	0.40 g
Total Fat	0.39 g
Saturated Fat	0.13 g
Cholesterol	none
Calories from Fat	3.50
Proteins, 6.25 Factor	2.45 g
Gluten	none
Phytic Acid	none
Ash	4.40 g
Sodium	0.18 g
Calcium	1.36 g
Potassium	335 mg
iron	6.45 mg
Moisture	6.40 g
Calories	65

The above information may vary due to the natural variations that occur as a result of climate and growing region.

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(US Patent Approved)



MATERIAL SAFETY DATA SHEET

OSHA Standard 29 CFR 1910.1200

Manufacturer's Name:

Wm. Bolthouse Farms, Inc.

Address:

7200 East Brundage Lane

Bakersfield, CA 93307-3016 USA

Phone:

661-366-7280

Fax:

661-366-9236

SECTION I: PRODUCT IDENTIFICATION EMERGENCY INFORMATION

Trade Name:

HYDROBIND™ carrot fiber

Description:

HYDROBIND™ carrot fiber is the fiber portion of the carrot

that is extracted, purified, dried and ground into an off-

white free-flowing powder.

SECTION II: HAZARDOUS COMPONENTS OF MIXTURES

None

SECTION III: HEALTH INFORMATION AND PROTECTION

Exposure limits: not established

Exposure effects:

Eye: no specific hazard known, contact may cause transient irritation.

Skin: low hazard risk with proper handling.

Inhalation: low hazard risk with proper handling.

Ingestion: no specific hazard known.

Special Handling:

Avoid prolonged exposure to dust, eye protection and dust masks recommended in high

dust areas.

First Aid:

Inhalation: none needed

Skin: none needed

Eye: Flush eyes with water

Ingestion: none needed

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Effective Date: 5/16/05 Supersedes 2/17/05

(US Patent Approved)



MATERIAL SAFETY DATA SHEET

OSHA Standard 29 CFR 1910.1200

SECTION IV: FIRE AND EXPLOSION DATA

Flash point:

N/A

Special Fire Fighting Procedures:

Use water spray to keep down dust. Self-contained breathing apparatus

recommended for protection from any hazardous combustion products.

Unusual Fire and Explosion Hazards:

Moderate fire and explosion hazard in the form of dust when exposed to

heat or flame.

Extinguishing Media: Water, foam, dry chemical or carbon dioxide.

SECTION V: SPILL CONTROL PROCEDURE

Sweep up and dispose of the material according to local, state and federal regulations.

SECTION VI: NOTES

None

SECTION VII: TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Appearance

off-white free-flowing powder

Water Solubility:

slightly soluble in water

Solids:

more than 92%

Boiling Point:

N/A

SECTION VIII: REACTIVITY DATA

None

SECTION IX: STORAGE AND HANDLING

Store in a dry, well-ventilated area.

SECTION X: HAZARDOUS CLASSIFICATION

None

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ATTACHMENT B

GMO Statement for Carrot Fiber

ORGANIC PROGRAM



Wm. Bolthouse Farms, Inc.
7200 East Brundage Lane • Bakersfield, CA 93307-3016
661/366-7280 • Fax: 661/366-9236

March 15, 2006

To Whom It May Concern:

Wm. Bolthouse Farms grows carrots from commercially available seed varieties obtained from seed companies who directly breed varieties for our particular use. Only standard and conventional cross-pollinating techniques are used by these companies to breed our carrot varieties.

Furthermore, Wm. Bolthouse Farms has never grown carrots from genetically modified organisms (GMO's), nor do we currently grow carrots from GMO seed. Finally, there is <u>no</u> GMO carrot seed that is available or used commercially in the United States.

Sincerely, John Guerard Agronomist Wm. Bolthouse Farms Geskard Gaugel Q. C. Manager WM. Bothows Farms, Conc 3/15/06

ATTACHMENT C

FDA - GRAS Notice No. GRN 000116

ORGANIC PROGRAM

U. S. Food and Drug Administration Center for Food Safety and Applied Nutrition Office of Food Additive Safety March 20, 2003

Agency Response Letter GRAS Notice No. GRN 000116

Nancy J. Rachman, Ph.D. Exponent 1730 Rhode Island Avenue, NW Suite 1100 Washington, DC 20036

Re: GRAS Notice No. GRN 000116

Dear Dr. Rachman:

The Food and Drug Administration (FDA) is responding to the notice, dated September 6, 2002, that you submitted on behalf of Wm. Bolthouse Farms, Inc. (Bolthouse) in accordance with the agency's proposed regulation, proposed 21 CFR 170.36 (62 FR 18938; April 17, 1997; Substances Generally Recognized as Safe (GRAS); the GRAS proposal). FDA received the notice on September 13, 2002, filed it on October 3, 2002, and designated it as GRAS Notice No. GRN 000116.

The subject of the notice is carrot fiber. The notice informs FDA of the view of Bolthouse that carrot fiber is GRAS, through scientific procedures, for use in baked goods as a texturizer at a maximum level of 5 percent by weight of flour, for use in meat substitutes (e.g., meatless sausages and meatless patties) at a maximum level of 5 percent, and for use in meat and poultry products as a binder/extender and to reduce water purging/gelling at a maximum level of 5 percent. The notice includes the findings of a panel of individuals who evaluated the data and information that are the basis for Bolthouse's GRAS determination. Bolthouse considers these individuals to be qualified by scientific training and experience to evaluate the safety of substances added to food.

Bolthouse describes the identity, composition, and method of manufacture of carrot fiber. Carrot fiber is manufactured from fresh carrots through a series of physical processes that renders a free flowing, bland tasting, off-white powder. Bolthouse notes that there is no chemical extraction or treatment involved, and that the final form of the ingredient is unbleached. Carrot fiber has a pH of 5.0 at 1 percent solution and is slightly soluble in

water. On a dry solids basis, the ingredient is approximately 27 percent soluble fiber and 65 percent insoluble fiber (for a total dietary fiber content of approximately 92 percent). Bolthouse notes that carrot fiber has the ability to absorb at least 10 times its weight in water but only 4 times its weight in oil. Bolthouse provides specifications for the manufactured ingredient, including specifications for appearance and proximate composition.

Bolthouse notes that the use of carrot fiber is self-limiting in that use levels that exceed 5 percent of flour weight in bakery products or 5 percent in meat products result in poor texture and flavor that render the products undesirable to consumers. Bolthouse estimates dietary intake of carrot fiber using several methods and, thus, provides a range of estimated intakes. Based on per capita consumption of carrots, Bolthouse estimates that dietary intake of carrot fiber would be 0.3 grams/person/day (g/p/d) at the mean and 0.9 g/p/d at the 90th percentile. Based on the intake of carrot fiber in a single serving of franks/sausages or meat patties/canned meat, Bolthouse estimates that dietary intake of carrot fiber would be 2.5 grams/serving (g/s) for franks/sausages or 4.2 g/s for meat patties/canned meat. (1)

Bolthouse discusses the historical consumption of carrots, both fresh and cooked, including the fiber portion. Bolthouse cites published articles that carrots, including their fiber, have been consumed for centuries. (2)

Standards of Identity

In the notice, Bolthouse states its intention to use carrot fiber in several food categories, including foods for which standards of identity exist (i.e., certain bakery products), located in Title 21 of the Code of Federal Regulations. We note that an ingredient that is lawfully added to food products may be used in a standardized food only if it is permitted by the applicable standard of identity. If Bolthouse has any questions about the use of carrot fiber in standardized foods, other than meat or poultry products, that would be marketed in the United States, Bolthouse should contact the staff in the Office of Nutritional Products, Labeling and Dietary Supplements (ONPLDS), Division of Standards and Labeling Regulations, HFS-820, 5100 Paint Branch Parkway, College Park, MD 20740. Bolthouse can reach this division by telephone at (301) 436-2371.

Use in Meat and Poultry Products

During its evaluation of GRN 000116, FDA consulted with the Labeling and Consumer Protection Staff of the Food Safety and Inspection Service (FSIS) of the United States Department of Agriculture (USDA). Under the Federal Meat Inspection Act and the Poultry Products Inspection Act, FSIS is responsible for determining the efficacy and suitability of food ingredients in meat and poultry products as well as prescribing safe conditions of use. Suitability relates to the effectiveness of the ingredient in performing the intended purpose of use and the assurance that the conditions of use will not result in an adulterated product, or one that misleads consumers.

FSIS advises that Bolthouse has provided sufficient data to support their assertion that this ingredient is suitable as a binder in various comminuted meat and poultry products. Therefore, FSIS would not object to the use of this ingredient as a binder in various non-standardized comminuted meat and poultry products, provided that it does not exceed 3.5 percent of the product formulation.

The Federal meat inspection regulations list specific binding additives for use below 3.5 percent of meat product formulation. FSIS has viewed the use of binders and extenders at levels greater than 3.5 percent as re-characterizing products. The ingredient can be used at levels higher than 3.5 percent (not to exceed 5 percent) if the non-standardized comminuted meat and poultry products are appropriately named to reflect the presence of the ingredient (e.g., beef, water, and binder product). Currently, there are no allowances for the use of the ingredient as a binder in standardized meat products.

FSIS also advises that the ingredient will need to be declared on the labeling of meat and poultry products containing it as "isolated carrot product."

FSIS requested that FDA advise Bolthouse to seek regulatory guidance from FSIS, Labeling and Consumer Protection Staff, about the use of the ingredient in meat and poultry products. Bolthouse should direct such an inquiry to Dr. Robert Post, Director, Labeling and Consumer Protection Staff, Office of Policy, Program Development and Evaluation, Food Safety and Inspection Service, 1400 Independence Ave., S.W., Suite 602, Annex, Washington, DC 20250-3700. The telephone number for his office is (202) 205-0279 and the telefax number is (202) 205-3625.

Conclusions

Based on the information provided by Bolthouse, as well as other information available to FDA, the agency has no questions at this time regarding Bolthouse's conclusion that carrot fiber is GRAS under the intended conditions of use. The agency has not, however, made its own determination regarding the GRAS status of the subject use of carrot fiber. As always, it is the continuing responsibility of Bolthouse to ensure that food ingredients that the firm markets are safe, and are otherwise in compliance with all applicable legal and regulatory requirements.

In accordance with proposed 21 CFR 170.36(f), a copy of the text of this letter, as well as a copy of the information in Bolthouse's notice that conforms to the information in proposed 21 CFR 170.36(c)(1), is available for public review and copying on the homepage of the Office of Food Additive Safety (on the Internet at http://www.cfsan.fda.gov/~lrd/foodadd.html).

Sincerely,
/s/
Laura M. Tarantino, Ph.D.
Deputy Director
Office of Food Additive Safety

Center for Food Safety and Applied Nutrition

cc: Dr. Robert Post, Director Labeling and Consumer Protection Staff Office of Policy, Program Development and Evaluation Food Safety and Inspection Service 1400 Independence Ave., SW, Suite 602, Annex Washington, DC 20250-3700

(1)FDA does not concur with the methods used by Bolthouse to estimate dietary intake of carrot fiber. FDA's own estimate of the daily intake for carrot fiber under the conditions of use proposed by Bolthouse is 4 g/p/d at the mean and 7.5 g/p/d at the 90th percentile.

(2)FDA is aware of a publicly available database that lists the fiber content of carrots.

Food Ingredients and Packaging | Summary of all GRAS Notices

Foods Home | FDA Home | Search/Subject Index | Disclaimers & Privacy Policy | Accessibility/Help

Content last updated by amd/lah/pmg on 2003-APR-07 Hypertext updated by amd/lah/pmg/rxm on 2003-APR-08

ATTACHMENT D

USDA - FSIS Letter

USDA HATIOHAL ORGANIC PROGRAM 2001 JAN 29 P 1: 54

DEPARTMENT OF HEALTH & HUMAN SERVICES



Food and Drug Administration College Park, MD 20740

Nancy J. Rachman, Ph.D. Exponent 1730 Rhode Island Avenue, NW Suite 1100 Washington, DC 20036

MAR 2 0 2003

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The subject of the notice is carrot fiber. The notice informs FDA of the view of Bolthouse that carrot fiber is GRAS, through scientific procedures, for use in baked goods as a texturizer at a maximum level of 5 percent by weight of flour, for use in meat substitutes (e.g., meatless sausages and meatless patties) at a maximum level of 5 percent, and for use in meat and poultry products as a binder/extender and to reduce water purging/gelling at a maximum level of 5 percent. The notice includes the findings of a panel of individuals who evaluated the data and information that are the basis for Bolthouse's GRAS determination. Bolthouse considers these individuals to be qualified by scientific training and experience to evaluate the safety of substances added to food.

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Bolthouse notes that the use of carrot fiber is self-limiting in that use levels that exceed 5 percent of flour weight in bakery products or 5 percent in meat products result in poor texture and flavor that render the products undesirable to consumers. Bolthouse estimates dietary intake of carrot fiber using several methods and, thus, provides a range of estimated intakes. Based on per capita consumption of carrots, Bolthouse estimates that dietary intake of carrot fiber would be 0.3

grams/person/day (g/p/d) at the mean and 0.9 g/p/d at the 90th percentile. Based on the intake of carrot fiber in a single serving of franks/sausages or meat patties/canned meat, Bolthouse estimates that dietary intake of carrot fiber would be 2.5 grams/serving (g/s) for franks/sausages or 4.2 g/s for meat patties/canned meat.¹

Bolthouse discusses the historical consumption of carrots, both fresh and cooked, including the fiber portion. Bolthouse cites published articles that carrots, including their fiber, have been consumed for centuries.²

Standards of Identity

In the notice, Bolthouse states its intention to use carrot fiber in several food categories, including foods for which standards of identity exist (i.e., certain bakery products), located in Title 21 of the Code of Federal Regulations. We note that an ingredient that is lawfully added to food products may be used in a standardized food only if it is permitted by the applicable standard of identity. If Bolthouse has any questions about the use of carrot fiber in standardized foods, other than meat or poultry products, that would be marketed in the United States, Bolthouse should contact the staff in the Office of Nutritional Products, Labeling and Dietary Supplements (ONPLDS), Division of Standards and Labeling Regulations, HFS-820, 5100 Paint Branch Parkway, College Park, MD 20740. Bolthouse can reach this division by telephone at (301) 436-2371.

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FSIS advises that Bolthouse has provided sufficient data to support their assertion that this ingredient is suitable as a binder in various comminuted meat and poultry products. Therefore, FSIS would not object to the use of this ingredient as a binder in various non-standardized comminuted meat and poultry products, provided that it does not exceed 3.5 percent of the product formulation.

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²FDA is aware of a publicly available database that lists the fiber content of carrots.

than 3.5 percent as re-characterizing products. The ingredient can be used at levels higher than 3.5 percent (not to exceed 5 percent) if the non-standardized comminuted meat and poultry products are appropriately named to reflect the presence of the ingredient (e.g., beef, water, and binder product). Currently, there are no allowances for the use of the ingredient as a binder in standardized meat products.

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Sincerely,

Laura M. Tarantino, Ph.D.

Deputy Director

Office of Food Additive Safety

Center for Food Safety and Applied Nutrition

cc: Dr. Robert Post, Director
Labeling and Consumer Protection Staff
Office of Policy, Program Development and Evaluation
Food Safety and Inspection Service
1400 Independence Ave., S.W., Suite 602, Annex
Washington, DC 20250-3700

ATTACHMENT E

Manufacturing Process

ORGANIC PROGRAM

2001 JAN 29 P 1: 54

HYDROBIND - Carrot Fiber
Patented (US Patent No. 6,645,546) and produced solely by Wm. Bolthouse Farms, Inc.
GRAS Notice No. GRN 000116

Process Description:

Bolthouse Farms is one of the leading suppliers of fresh peeled baby cut carrots in North America. The fresh carrots are cleaned, sorted, cut, peeled and packaged for shipment to customers on a daily basis. The processing is completed on a year-round basis with a daily consumption of at least 1000 tons of fresh carrots. During the cutting and peeling of the fresh cleaned carrots small pieces of carrots including carrot peelings are collected as a byproduct in a water stream. This byproduct stream, trimmings and peelings of fresh carrots, is then de-watered via a mechanical belt press, dried via a heated air process, and milled into a free-flowing off-white powder, the carrot fiber. The bulk powdered carrot fiber is packed in multi-wall bags for distribution of food processors worldwide.

Furthermore, carrot fiber contains no added colors, flavors, animal products, preservatives nor has been treated with irradiation.

CONFIDENTIAL BUSINESS INFORMATION

ATTACHMENT F

Comparative Functionality Data of Commercially Available Plant Fibers

DRGANIC PROGRAM

ATTACHMENT G

Letter of Continuing Guarantee

ORGANIC PROGRAM



Wm. Bolthouse Farms, Inc. 7200 East Brundage Lane • Bakersfield, CA 93307-3016 661/366-7205 • Fax: 661/366-9236

CONTINUING GUARANTEE

The undersigned grower and/or shipper hereby guarantees, as of the date of shipment, the following with respect to its product, Hydrobind® carrot fiber:

- 1. Raw materials for said product has been grown by the undersigned or under its supervision or control;
- 2. Said product is not adulterated or misbranded within the meaning of the Federal Food, Drug and Cosmetic Act, 21 U.S.C. Sections 301 et seq. ("the Act:");
- Sald product is not prohibited by the Act from being introduced into interstate commerce;
- 4. Said product is not adulterated or misbranded within the meaning of any applicable state food and drug law;
- 5. Any pesticides or chemicals used by the undersigned on the raw materials for said product comply with the rules and regulations of the Food and Drug Administration of the U.S. Department of Health and Human Services and the U.S. Department of Agriculture and the California Department of Food and Agriculture. Only pesticide chemicals authorized by all applicable state and federal regulations have been used at authorized times and in conformity with the registration and label of the supplier.

This guarantee shall be a continuing guarantee and shall be binding upon Wm. Bolthouse Farms, Inc. with respect to all shipments or deliveries of Hydrobind® carrot fiber shipped or delivered to your firm (including goods in transit), before the receipt by you of written notice of revocation thereof.

01.28.07	Wm. Bolthouse Farms, Inc.
Date	

Andre Radandt, President



April 10, 2006

Duy Truong Bolthouse 7200 East Brundage Lane Bakersfield, CA 93307 Analytical Report No.: CL1760-12

Listed below are the results of our analyses for sample(s) received on March 27, 2006.

FBCR(SP)06083-Carrot Fiber 3/24/06

NFL ID: AC46477 Screen	Analyte	Result	Units	MDL	Method Ref
Carbamates Screen	Carbamates	Not Detected	ppm	0.10	MN3204
Organochlorinated Screen	Organochlorinated	Not Detected	ppm	0.20	MN3201
Organonitrogen Screen	Organonitrogens	Not Detected	ppm	0.10	MN3203
Organophosphate Screen	Organophosphates	Not Detected	ppm	0.05	MN3200

MDL = Method Detection Limit ToL = US EPA tolerances, if applicable Individual detection limits for the Multi-Residue Analysis can be found on our website: www. TheNFL.com

Results are reported based on the sample(s) as received, unless otherwise noted.

Please note that these results apply only to the sample(s) submitted for this report. Samples from a different portion of the same lot may produce different results.

Your sample(s) will be retained for thirty days from the date of this report. If we do not hear from you by that time, the sample(s) will be discarded.

Should you have any questions concerning these results, please do not hesitate to contact us.

Thank you for using the services of The National Food Laboratory.

Sincerely,

Grace Bandong. Laboratory Manager, Analytical Services - Chemistry

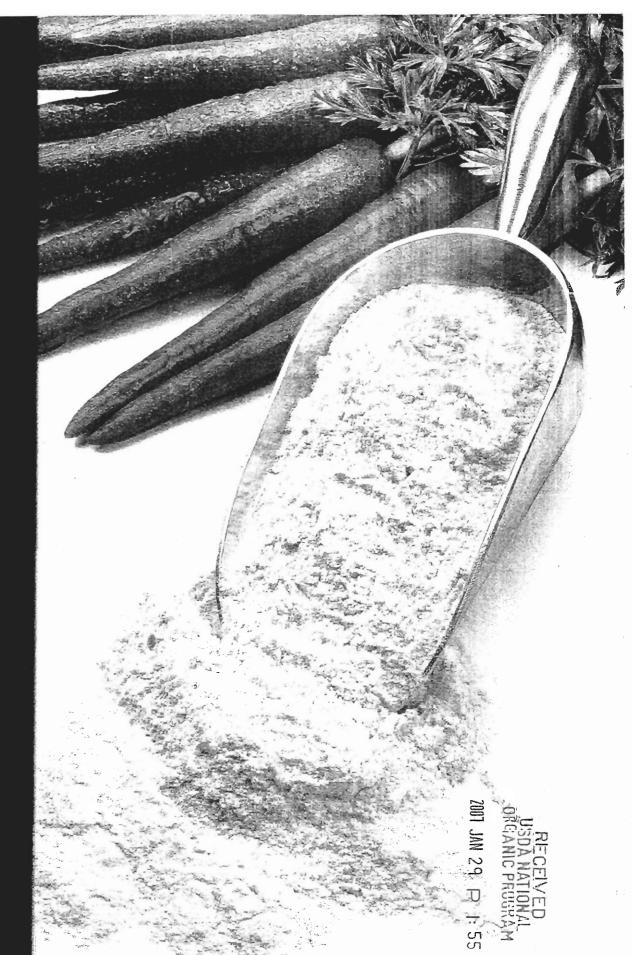
cc: Patrick Manning, Accounting

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2001 JAN 29 P 1: 55

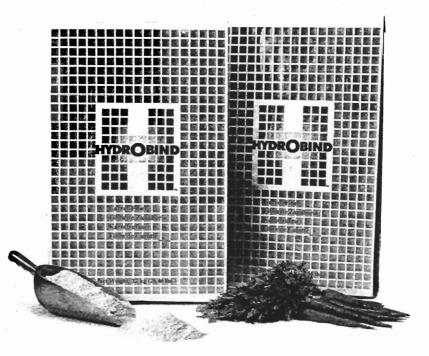
CELEBRATING 30 YEARS WITH OUR CLIENTS, LAUNCHING NEW PRODUCTS AND PROTECTING THEIR BRANGS of 1976-2006

Fiber





Fiber



HYDROBIND™ Carrot Fiber is a functional fiber so good only the carrot technology leader can make it!

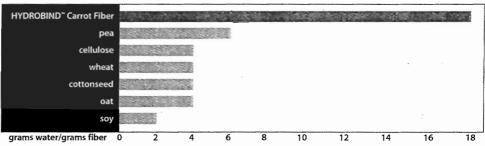
HYDRODBIND[™] is extracted from freshly harvested carrots. And this is no ordinary ingredient. HYDRODBIND[™] absorbs more water than other natural fibers. Try **18 times** its weight in water! It works because storing water is what a carrot does.

Ingredient applications include:

- Yield improvement in processed meats and poultry products
- · Shelf Life extension in baked goods
- Purge reduction in packaged processed meat and poultry products
- Viscosity control in sauces and fillings
- Fiber and mouth feel enhancement in beverages and beverage mixes

HYDRODBIND™ is an all-natural GRAS approved functional food ingredient that is non-allergenic, non-GMO, and label friendly. HYDRODBIND™ has been approved for use in all non-standard processed meat and poultry products. Think what it can do in your product formulations!

WATER BINDING COMPARISON



PACKAGE	DIMENSIONS	NET	GROSS	ORDER STATUS	AVAILABILIT
Poly-Lined Bag	31" x 16" x 5"	12 kg.	12.4 kg.	Inventory Item	All year
Pallet of 65 Bags	31" x 16" x 5"	780 kg.	806 kg.	Inventory Item	All year
Super Sack				Special Order	All year
	Pallet of 65 Bags	Pallet of 65 Bags 31" x 16" x 5"	Pallet of 65 Bags 31" x 16" x 5" 780 kg.	Pallet of 65 Bags 31" x 16" x 5" 780 kg. 806 kg.	Pallet of 65 Bags 31" x 16" x 5" 780 kg. 806 kg. Inventory Item

