

ALGAE CASING

PRODUCT HIGHLIGHTS:

FEATURES

- Is an edible casing made from water soluble polysaccharides.
- Unique alternative to cellulose, collagen and natural sausage casing.
- Great for use in vegetarian products.
- Suitable for fresh, cooked, smoked & cooked, or dry cure sausage products.
- Composed of entirely non-animal based polymers.
- Does not contribute to cross-species contamination or concern for animal based illness
- Ingredients used are renewable and abundantly available.
- Complies with Kosher & Halal requirements.
- Does not affect nutritional profile of product.
- Excellent machinability improves stuffing yields.
- Unique texture and appearance.
- No artificial colouring.
- Available in a range of diameters: 17mm, 20mm, 23mm, 24mm, 32mm.

APPLICATIONS:

- Should be handled differently compared to collagen, natural or cellulose casing.
- Cannot be boiled or cooked in water.
- See attached sheet for specific handling instructions and suggested cook programs.

SPECIFICATIONS:

- Free from all known allergens.
- Non-GMO.
- GRAS Status.
- To be stored unopened under regular or dry storage conditions.
- Avoid exposure to high humidity, steam or hot water.

SUGGESTED USAGE:

- **Smoked & Cooked sausage:**
 - Stuff out sausages on a linking system (example Handtmann, Vemeg, etc..)*
 - Smoke Program

| | | | |
|-------|-------------------------|--------|-------------------------|
| Dry | 60°C | 15% RH | 40 mins |
| Smoke | Natural or liquid smoke | | 30 mins |
| Dry | 60°C | 15% RH | 20 mins |
| Cook | 75°C | 75% RH | to internal temperature |
- Remove from smokehouse and let cool for 10 minutes.
Shower for 2 minutes
Refrigerate prior to packaging

*See shipping page for stuffing horn sizes recommended for each dimension of casing.

Specification Sheet

Algae Casing

- **Fresh sausage:**
 - Stuff our sausages on a linking system (example Handtmann, Vemeg, etc.).*
 - Sausages can also be run through Z-linked for portioning.
 - Package sausages.
 - Sausages can be sold refrigerated or frozen.
 - Cooking instruction for end user:
 - 1- Pan fry in lightly oiled skillet over medium-high heat.
 - 2- Grill or BBQ over medium heat (lightly greased surface).
 - 3- Deep fry.
- **Fully cooked vegetarian sausage:**
 - Stuff out sausages on a linking system (example Handtmann, Vemeg, etc..)*
 - Cook Program

| | | | |
|------|-------|--------|---------------------|
| Dry | 60 °C | 10% RH | 30 mins |
| Cook | 85 °C | 60% RH | 85 °C internal temp |
 - Cooking instruction for end user:
 - 1- Pan fry in lightly oiled skillet over medium-high heat.
 - 2- Bake in preheated conventional oven (350 °F) for 10-12 minutes (rotate sausage half way through cook time).

SPECIFICATION SHEET:

“ALGAE CASING 17, 20, 23, 26 mm”.

DESCRIPTION

Edible film composed of natural polysaccharides and water.

INGREDIENTS:

All components meet Food Chemical Codex requirements and are considered GRAS. All ingredients are Kosher certified.

PACKAGING:

Available in a variety of widths and sizes. Packaged in food grade poly bags.

STORAGE INSTRUCTIONS:

Product should be stored in sealed bags under dry storage conditions and not refrigerated or frozen.

SHELF LIFE:

18 months

*See shipping page for stuffing horn sizes recommended for each dimension of casing.

Specification Sheet

Algae Casing

BACTERIOLOGICAL DATA:

| Test | | | |
|--------------------------|-------|----------|-------------|
| | Spec | Units | Method |
| Total Plate Count | <3000 | col/gram | AOAC 990.12 |
| Coliform | <20 | col/gram | AOAC 991.14 |
| Yeast & Mold | <200 | col/gram | BAM Ch 18 |
| Salmonella | Neg. | /gram | BAM Ch 5 |
| E.Coli | <20 | col/gram | AOAC 991.14 |

MECHANICAL DATA:

| Test | | | |
|------------------|---------------------|-------|---------|
| | Specification range | Units | Method |
| Moisture | 8.0 – 10.5 | % | TP15.09 |
| Thickness | 1.7 – 1.9 | mils | TP15.12 |

NUTRITIONAL (per 100 g):

| | | | |
|--------------------------|--------|-------------------|--------|
| Calories (kcal) | 356.27 | Carbohydrates (g) | 82.61 |
| Calories from Fat (kcal) | 0.30 | Dietary Fiber (g) | 12.67 |
| Fat (g) | 0.03 | Total Sugar (g) | 0.00 |
| Mono Fat (g) | 0.00 | Water (g) | 12.00 |
| Poly Fat (g) | 0.00 | Vitamin A-IU (IU) | 0.00 |
| Saturated Fat (g) | 0.01 | Vitamin C (mg) | 0.00 |
| Trans Fatty Acid (g) | 0.00 | Sodium (mg) | 134.43 |
| Protein (g) | 0.57 | Calcium (mg) | 184.83 |
| Cholesterol (mg) | 0.00 | Iron (mg) | 0.03 |
| | | Potassium (mg) | 18.20 |

*Please note that the values are derived by calculations only based on available reference data.

ALLERGEN CHECKLIST:

. Original form

| Component | Present in the product |
|---|------------------------|
| Peanut or its derivatives e.g., Peanut - pieces, protein, oil, butter, flour, and mandelona nuts (almond flavoured peanut product) etc. Peanut may also be known as ground nut. | NO |
| Tree nuts almonds, Brazil nuts, cashews, hazelnuts (filberts), macadamia nuts, pecans pine nuts (pinyon, pinon), pistachios and walnuts or their derivatives, e.g., nut butters and oils etc. | NO |
| Sesame or its derivatives, e.g., paste and oil etc. | NO |
| Milk or its derivatives, e.g., milk caseinate, whey and yogurt powder etc. | NO |
| Eggs or its derivatives, e.g., frozen yolk, egg white powder and egg protein isolates, etc. | NO |
| Fish or its derivatives, e.g., fish protein and extracts, etc. | NO |

Specification Sheet

Algae Casing

| | |
|--|----|
| Crustaceans (including crab, crayfish, lobster prawn and shrimp) and Shellfish (including snails, clams, mussels, oysters, cockle and scallops) or their derivatives, e.g., extracts, etc. | NO |
| Soy or its derivatives, e.g., lecithin, oil, tofu and protein isolates etc. | NO |
| Wheat, triticale or their derivatives, e.g., flour, starches and brans, etc. Includes other wheat varieties such as spelt, durum, kamut, emmer, etc. | NO |
| Mustard or its derivatives, e.g., mustard seeds, mustard flour, ground mustard, prepared mustard etc. | NO |
| Sulphites, e.g., Sulphur dioxide and sodium metabisulphites, etc. List source: caramel color. | NO |
| Gluten protein or modified gluten protein from barley, oats, rye, triticale or wheat, including kamut or spelt. List source of gluten: barley, rye, oats. | NO |
| Others (as considered necessary) | / |

SPECIFICATION SHEET: “ALGAE CASING 32 mm”.

DESCRIPTION

Edible film composed of natural polysaccharides and water.

INGREDIENTS:

All components meet Food Chemical Codex requirements and are considered GRAS. All ingredients are Kosher certified.

PACKAGING:

Available in a variety of widths and sizes. Packaged in food grade poly bags.

STORAGE INSTRUCTIONS:

Product should be stored in sealed bags under dry storage conditions and not refrigerated or frozen.

SHELF LIFE:

18 months

BACTERIOLOGICAL DATA:

| Test | | | |
|--------------------------|-------|----------|-------------|
| | Spec | Units | Method |
| Total Plate Count | <3000 | col/gram | AOAC 990.12 |
| Coliform | <20 | col/gram | AOAC 991.14 |
| Yeast & Mold | <200 | col/gram | BAM Ch 18 |
| Salmonella | Neg. | /gram | BAM Ch 5 |
| E.Coli | <20 | col/gram | AOAC 991.14 |
| | | | |

MECHANICAL DATA:

| Test | | | |
|------------------|---------------------|-------|---------|
| | Specification range | Units | Method |
| Moisture | 8.0 – 10.5 | % | TP15.09 |
| Thickness | 1.9 – 2.1 | mils | TP15.12 |

Specification Sheet

Algae Casina

NUTRITIONAL (per 100 g):

| | | | |
|--------------------------|--------|-------------------|--------|
| Calories (kcal) | 356.27 | Carbohydrates (g) | 82.61 |
| Calories from Fat (kcal) | 0.30 | Dietary Fiber (g) | 12.67 |
| Fat (g) | 0.03 | Total Sugar (g) | 0.00 |
| Mono Fat (g) | 0.00 | Water (g) | 12.00 |
| Poly Fat (g) | 0.00 | Vitamin A-IU (IU) | 0.00 |
| Saturated Fat (g) | 0.01 | Vitamin C (mg) | 0.00 |
| Trans Fatty Acid (g) | 0.00 | Sodium (mg) | 134.43 |
| Protein (g) | 0.57 | Calcium (mg) | 184.83 |
| Cholesterol (mg) | 0.00 | Iron (mg) | 0.03 |
| | | Potassium (mg) | 18.20 |

*Please note that the values are derived by calculations only based on available reference data.

ALLERGEN CHECKLIST:

. Original form

| Component | Present in the product |
|---|------------------------|
| Peanut or its derivatives e.g., Peanut - pieces, protein, oil, butter, flour, and mandelona nuts (almond flavoured peanut product) etc. Peanut may also be known as ground nut. | NO |
| Tree nuts almonds, Brazil nuts, cashews, hazelnuts (filberts), macadamia nuts, pecans pine nuts (pinyon, pinon), pistachios and walnuts or their derivatives, e.g., nut butters and oils etc. | NO |
| Sesame or its derivatives, e.g., paste and oil etc. | NO |
| Milk or its derivatives, e.g., milk caseinate, whey and yogurt powder etc. | NO |
| Eggs or its derivatives, e.g., frozen yolk, egg white powder and egg protein isolates, etc. | NO |
| Fish or its derivatives, e.g., fish protein and extracts, etc. | NO |
| Crustaceans (including crab, crayfish, lobster prawn and shrimp) and Shellfish (including snails, clams, mussels, oysters, cockle and scallops) or their derivatives, e.g., extracts, etc. | NO |
| Soy or its derivatives, e.g., lecithin, oil, tofu and protein isolates etc. | NO |
| Wheat, triticale or their derivatives, e.g., flour, starches and brans, etc. Includes other wheat varieties such as spelt, durum, kamut, emmer, etc. | NO |
| Mustard or its derivatives, e.g., mustard seeds, mustard flour, ground mustard, prepared mustard etc. | NO |
| Sulphites, e.g., Sulphur dioxide and sodium metabisulphites, etc. | NO |
| List source: caramel color. | NO |
| Gluten protein or modified gluten protein from barley, oats, rye, triticale or wheat, including kamut or spelt. List source of gluten: barley, rye, oats. | NO |
| Others (as considered necessary) | / |

Specification Sheet

Algae Casing

SHIPPING:

- Algae casing is sold in case quantities.
- Product details specific to each casing:

| Algae Casing 17 mm | |
|---------------------------|------------------|
| Product Code | 230X-172 |
| Caliber | 17 mm O.D. |
| Length | 12 M/39.4 ft |
| Quantity | 66 per caddy |
| Total Length | 792 M/ 2598.4 ft |
| Stuffing Horn Size | 10 |

| Algae Casing 20 mm | |
|---------------------------|------------------|
| Product Code | 230X-202 |
| Caliber | 20 mm O.D. |
| Length | 12 M/39.4 ft |
| Quantity | 50 per caddy |
| Total Length | 600 M/ 1968.5 ft |
| Stuffing Horn Size | 10 |

| Algae Casing 23 mm | |
|---------------------------|------------------|
| Product Code | 230X-232 |
| Caliber | 23 mm O.D. |
| Length | 12 M/39.4 ft |
| Quantity | 50 per caddy |
| Total Length | 600 M/ 1968.5 ft |
| Stuffing Horn Size | 12 |

| Algae Casing 26 mm | |
|---------------------------|------------------|
| Product Code | 230X-262 |
| Caliber | 26 mm O.D. |
| Length | 12 M/39.4 ft |
| Quantity | 32 per caddy |
| Total length | 384 M/ 1259.8 ft |
| Stuffing Horn Size | 16 |

| Algae Casing 32 mm | |
|---------------------------|-----------------|
| Product Code | 230X-321 |
| Caliber | 32 mm O.D. |
| Length | 12 M/39.4 ft |
| Quantity | 21 per caddy |
| Total Length | 252 M/ 826.8 ft |
| Stuffing Horn Size | 23 |

Fecha y Firma:

07/03/2017