
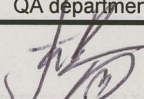


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|---|--------------------------|-----------------------|--------------------------|---|
|  | HACCP | | | Authorised by QA department  |
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| | HACCP manager: M. Keizer | | Version: 7 | |
| | Chapter | | Page: 1 | |
| | Subject | Product specification | Organic sunflowerkernels | |

Organic sunflowerkernels Grade AA are procured from a selected group of approved suppliers and comply with our strictest microbiological specification. In some cases we even reprocess the goods in our HACCP/BRC approved factory in The Netherlands. This way we fully guarantee the quality we commit ourself to deliver to our clients.

Physical Characteristics

| | |
|-----------------|-------------------|
| Colour of seeds | grey - beige |
| Broken kernels | max. 10% |
| Taste / Smell | typical sunflower |
| Appearance | oval |

| | | |
|----------|----------|--------|
| FFA | max 2 | % |
| Peroxide | max 5 | meq/kg |
| Humidity | max 7 | % |
| Purity | min 99,9 | % |

Nutritional value per 100 grams

| | | |
|------------------------|-------|--------|
| Energetic value | 2390 | kJoule |
| | 570 | kcal |
| Protein | ± 22 | % |
| Carbohydrates | ± 19 | % |
| of which dietary fiber | 10,5 | % |
| Oil content (fat) | ± 50 | % |
| Ash | max 4 | % |

Minerals per 100 grams

| | | |
|---------------|------|-----|
| Calcium, Ca | 116 | mg |
| Iron, Fe | 6,77 | mg |
| Magnesium, Mg | 354 | mg |
| Phosphorus, P | 705 | mg |
| Potassium, K | 689 | mg |
| Sodium, Na | 3 | mg |
| Zinc, Zn | 5,06 | mg |
| Copper, Cu | 1,75 | mg |
| Manganese, Mn | 2,02 | mg |
| Selenium, Se | 59,5 | mcg |

Vitamins per 100 grams

| | | |
|--------------------------------|------|---------|
| Vitamin C, total ascorbic acid | 1,4 | mg |
| Thiamin B1 | 2,29 | mg |
| Riboflavin B2 | 0,25 | mg |
| Niacin | 4,5 | mg |
| Pantothenic acid | 6,7 | mg |
| Vitamin B-6 | 0,77 | mg |
| Folate, total | 227 | mcg |
| Vitamin B-12 | 0 | mcg |
| Vitamin A, IU | 50 | IU |
| Vitamin A, RE | 5 | mcg_RE |
| Vitamin E | 50,2 | mcg_ATE |

Shelf life
18 months

Marking on bags

11 digit traceability mark or
Product name, netto weight, lot number, best before

Microbiology

| | | |
|-----------------------------|------------|-------|
| Total plate count | < 250,000 | cfu/g |
| Yeast | < 5,000 | cfu/g |
| Mould | < 5,000 | cfu/g |
| Enterobacteriaceae | < 7,500 | cfu/g |
| Coliforms | < 7,500 | cfu/g |
| Salmonella | neg /25 gr | |
| Escherichia coli | < 10 | cfu/g |
| Staphylococcus aureus | < 10 | cfu/g |
| Bacillus cereus | < 10 | cfu/g |
| Sulphite reducing anaerobes | < 10 | cfu/g |
| Clostridium perfringens | < 10 | cfu/g |
| Faecal streptococci | < 10 | cfu/g |
| Campylobacter | < 10 | cfu/g |
| Listeria monocytogenes | < 10 | cfu/g |

Pesticides

According to EU regulation

Heavy metals

| | | |
|-----------|-------|-----|
| - Cadmium | < 300 | ppb |
| - Lead | < 500 | ppb |
| - Mercury | < 30 | ppb |
| - Arsenic | < 30 | ppb |

Toxines

| | | |
|-------------------------|-----|-----|
| - Aflatoxin B1+B2+G1+G2 | < 4 | ppb |
| - Ochratoxin A | < 5 | ppb |

Packaging

| |
|---|
| - 25 kgs net paper or poly bags |
| - 50 lbs net paper or poly bags |
| - stabilized big bags 500 - 750 kgs net |

Storage advise

Store in cool, dry and dark place, preferably below 15°C.

| Alba list | yes | no |
|----------------------|-----|----|
| cow milk protein | | * |
| lactose | | * |
| chicken egg | | * |
| soya protein | | * |
| soya oil | | * |
| gluten | | * |
| wheat | | * |
| rye | | * |
| beef (-derivates) | | * |
| pork (-derivates) | | * |
| chicken (-derivates) | | * |
| fish | | * |
| crustacean/shellfish | | * |
| corn/maize | | * |
| cocoa | | * |
| yeast | | * |
| pulses | | * |
| nuts | | * |
| nuts oil | | * |

* colours E102, E110, E122, E123, E124 and E151

** aniseed, dill, caraway, celery, chervil, corinder, lavas, cumin, myrrh, parsley, fennel.

*** if sulphite or benzoic acid and parabens are present, please note the quantity

| Alba list | yes | no |
|---|-----|----|
| peanuts | | * |
| peanut oil | | * |
| sesame seed | | * |
| sesame oil | | * |
| glutamates | | * |
| sulphite (E220-E227) *** | | * |
| benzoic acids and parabenes (E210-E219) *** | | * |
| azo colours * | | * |
| tatazine (E102) | | * |
| cinnamon | | * |
| vanillin | | * |
| coriander | | * |
| celery | | * |
| umbelliferae ** | | * |
| carrot | | * |
| lupine | | * |
| mustard | | * |
| molluscs | | * |