**DEFINITION**

Gluten Free Quick rolled oats are obtained by laminating clean, healthy oat kernels that have been previously cut and kilned to ensure deactivation of its enzymes. Quick rolled oats do not contain chemical additives or preservatives.

Whole oat products contain 6 of the 8 amino acids that are essential for our organism, 65% of unsaturated fatty acids and beta-glucan exceeding 5%.

Each batch of our final product was approved by INTA; whose **standard is a maximum of 3 particles per million (ppm).**

Each batch produced is analyzed through "competitive ELISA" methodology

**INGREDIENT CONTENT**

Quick Rolled Oats 100% Oat

**CHEMICAL – PHYSICAL – MICROBIOLOGICAL PROPERTIES**

**CHEMICAL PROPERTIES**

**Parameter Specification 100 g**

Humidity 10.00 – 11.50 %

Energy 303 Kcal

Protein 11,7 g

Total fat 8,1 g

Available carbohydrates 46 g

Total dietary fiber 22,3 g

Insoluble dietary fiber 16,9 g

Soluble dietary fiber 5,4 g

Total sugar 1,03 g

Sodium 3 mg

Fat acidity (expressed as oleic acid) Max 6% (As percentage of extracted fat)

Enzyme activity (lipase) Negative

Aflatoxin Total (B1-B2-G1-G2) Max 10 ppb

Zearalenone Max 200 ppb

Deoxynivalenol Max 750 ppb

Ochratoxin Max 5 ppb

Pesticide residues Exempt Resolution N° 33 (2010), which establishes maximum pesticide residue tolerances in food and Exempt Resolution N° 762 (2011).

**MICROBIOLOGICAL PROPERTIES**

**Parameter Limit per gram**

**n c m M**

Mesophilic aerobe count 5 2 10³ 104

Coliform bacteria 5 2 <3 20

E. coli 5 0 <3 -

Where:

n = number of sample units to be examined

c = maximum quantity of sample units that may contain a number of organism between “m” and “M” for food to be regarded as acceptable

m = microbiological parameter value for which (or below which) food does not represent a health risk

M = microbiological parameter value above which food represents a health risk (Supreme Decree 977/96).

**PHYSICAL PROPERTIES**

DEFECTS

**Parameter Limits (100 gram sample)**

Gelatinized flakes Max 5 Units

Degenerated flakes 0 units

Burned flakes 0 units

Uncrushed kernels Max 1 Unit

IMPURITIES

**Parameter Limits (100 gram sample)**

Hull Max 4 units

Awn Max 2 units

Other 0 units

OTHER GRAINS

**Parameter Limits (100 gram sample)**

Wheat 0 units

Barley 0 units

Rapeseed 0 units

WEEDS

**Parameter Limits (100 gram sample)**

Ryegrass 0 units

Vetch 0 units

Wild Radish 0 units

Wild Oat 0 units

Other 0 units

GRADING

**Parameter Limits**

Retention on a N° 7 sieve Min 50%

Retention on a N° 25 sieve Max 38%

Ground Max 6%

Thickness 0.62 mm to 0.70 mm

**ORGANOLEPTIC PROPERTIES**

Color: Its color should be a very soft brown or mahogany.

Appearance: Homogeneous mix of medium size, smooth, compact rounded flakes, with soft edges and no particle shedding.

Odor and Taste: The product taste and aroma will be typical of toasted oats, with no strange or unpleasant odors or taste (rancid, bitter or chemical).

**SENSITIVE GROUP**

**Classification**: Gluten Free (Low gluten content <3 ppm)

**GMO STATEMENT**

(Genetically modified organisms)

Raw oats (as raw materials) and quick rolled oats (as final product) are not genetically modified products.

**SHELF LIFE**

Oats shelf life, when in optimal storage conditions, is 12 months from elaboration.

**STORAGE CONDITIONS**

Oats must be stored in a closed room, with ventilation slots properly protected against insect access, optimal temperature and relative humidity, separated from chemical products, wood, unprocessed cereals or any product with strong odors.

**PACKAGING DESCRIPTION**

Type of main container: Polyethylene bags

Type of secondary container (optional): Laminated polypropylene bags

Weight: 1Kg, 25 kg and 50 lbs

Color: Print on white label (corporate design)

Sealing: Single sewing with thread, with no jumps or defects

The product is packaged only in polypropylene bags or in bags with polyethylene linen inside according to the client requirements, weighing no more than 25 kg. The containers are closed, with no meal losses. No metal locks (hooks or clamps) are added.

Our containers comply with the residual monomers limits set forth in Art. 126 of the Food Health Regulation (Supreme Decree 977/96).

**LABELING**

Each primary packaging will be labeled with the component name, ingredients, weight, producer name and address, manufacturing lot number, elaboration date and expiration date, in compliance with the regulations on food labeling set forth in the Food Health Regulation (Paragraph II, Art. 107), or in compliance with special customer specifications and legal regulations of the country of destination, as required by the customer.

**HANDLING/PREPARATION INSTRUCTIONS**

Austral Granos recommends cooking its rolled oats at boiling temperature for 3 minutes prior to consumption.

Wherever this product is used, measures should be taken in order to prevent exposure to microbiological contamination by molds, yeasts, Enterobacteriaceae and salmonella.

**Basic preparation for all our rolled oats:**

1. Pour 6 teaspoons (40 g) of rolled oats in a bowl
2. Add sugar or sweetener to taste
3. Pour milk, hot or cold water, or yogurt, as preferred
4. Stir and serve

**DISTRIBUTION**

All Austral Granos products are marketed and distributed through its trade and export department. Our products are loaded, shipped and/or consigned in containers and/or trucks in our warehouses and loading yards located within the premises of the processing plant.

**Optimal Transport Conditions**

The following requirements must be in compliance:

* **Closed container**

Container must be sealed, except for the two ventilation slots these equipment have. There must be no light entries, holes or damage on the floor, walls or ceiling. It must be clean and dry when loading.

The floor will be covered with polyethylene or cardboard as appropriate.

* **Open top trailer**

Must be clean when loading, must have polyethylene covers and a tent to protect the load, its walls and floor should be smooth and there must be no cracks or rust.

The tent must be in good condition (clean and no breaks), the same applies for ropes and slings.

* **Sider trucks**

There must be no light entries, holes or damage on the floor, walls or ceiling. It must be clean and have no rust stains. The floor and load must be covered with polyethylene.

* **Utility vans**

Box must be sealed. There must be no light entries, holes or damage on the floor, walls or ceiling. It must be clean and have no rust stains. Grooved floors (refrigerated truck trailers) must be checked to prevent having water or other liquids in the grooves.

**USE AND BENEFITS**

Oat products are considered to be one of the healthiest foods for humans, as it is a cereal-based whole meal. This adds significant value to the product from the point of view of new vision for nutrition, which is fostered by different institutions dedicated to health worldwide that promote a natural, healthy diet. Such diet incorporates whole cereal grains in order to benefit from all nutritious components of cereals and to obtain a more complete nutrition, thus improving our health and quality of life.

Among the most common uses of oats are breakfast preparations (oat flakes), as ingredient in child and infant nutritional supplement meals (oatmeal and flakes), as ingredient in cereal bars for elite athletes and in different regional culinary preparations.

As food, oats and products made of this cereal contain the highest percentage of fatty acids among all small grain cereals with as much as 9%; of that percentage, 65% consists of unsaturated fatty acids. Oats also contain easy assimilation carbohydrates and a remarkable amount of amino acids (proteins), with 6 of the 8 amino acids that are essential for the human diet; this exceeds by far the amino acid content in other traditional cereals such as wheat, rice, corn or barley. Oats also have a relevant amount of soluble and insoluble fiber and an exceptional level of beta-glucan, which is a polysaccharide with enormous functionality qualities in regulating and lowering the glycemic index and cholesterol as it controls intestinal metabolism, thus regulating digestion and fat absorption.

**REGULATORY REQUIREMENTS**

All Austral Granos S.A. products and processes are in compliance with:

* Regulations by the Agriculture and Livestock Service (SAG)
* Food Health Regulation, Supreme Decree 977/96

**APPLICABLE METHODOLOGIES**

* Chilean regulation 1479Of.1979, sampling method and procedure for foodstuff to bulk
* Chilean regulation 1650 / 2Of.2009, net content determination in packaged foodstuff
* Chilean regulation 841Of. 1978, moisture determination in foodstuff
* Chilean regulation 1525Of.1979, pesticide residues. Maximal limits permitted in foodstuff
* Determination of pesticide residues as per GLC / ECD-NPD.
* Determination of Carbamates as per HPLC / DAD.
* Lipase analysis. 15-minute Pyrocatechol (internal method)
* Proximal chemical analysis as per Official Methods of Analysis of the Association of Official Analytical Chemists, A.O.A.C, 18th Edition, 2005
* Microbiological analysis as per Chilean Standards: 2676 / of 2002, 2734 / of 2002, 2675 / of 2002, 2636 / of 2001, 2635/1 / of 2001.
* Determination of aflatoxins in foods by HPLC / fluorescence
* Determination of Ochratoxin residues in food by HPLC / fluorescence
* Determination of Deoxynevalenol in food by HPLC / DAD

**SPECIFICATION APPROVAL**

Internal\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Signature of Austral grain processing company)

Client\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Signature of company representative)

**TRACK CHANGES**

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