	Position / Name	Signature / Date
Created by:	Head of Quality Management	
Reviewed by:	Head of Production	
Approved by:	Board representative	

DEFINITION

Endosperm oats flour

Natural product made from the fine grinding of oat flakes and a subsequent sifting, method which removes the bran leaving a pure product that contains mainly the endosperm. No chemical additives or preservatives have been used in the production of this product.

The endosperm oat flour comes from oat grains free of infestation and foreign matter.

COMPOSITION

Ingredient	**Content**
Oats	100%

CHEMICAL PROPERTIES

Parameter	**Specification in 100 grs.**
Humidity	Max. 12%
Protein	11.3 g
Fat	8.2 g
Available carbohydrates	56.5 g
Total dietary fiber	12.6 g
Insoluble dietary fiber	9.4 g
Soluble dietary fiber	3.2 g
Total sugar	1.3 g
Sodium	1.4 g
Enzyme activity (tyrosinase)	Negative
Fat acidity (expressed as oleic acid)	Max 6% (As percentage of extracted fat)
MYCOTOXINS	Maximum limit (*Article 169 of the Sanitary Regulation of Foods, D.S 977/96*).
Aflatoxin Total (B1-B2-G1-G2)	Max. 10 ppb
Zearalenone	Max. 200 ppb
Deoxynivalenol	Max. 750 ppb
Ochratoxin	Max. 5 ppb

PESTICIDES

According to Res. Ex.N ° 33 of 2010, that fixes maximum tolerances of pesticide residues in food, and Res. Ex.N ° 762 of 2011.

HEAVY METALS

Maximum limit (*Article 160 of the Sanitary Regulation of Foods, D.S 977/96*).

Lead	0.5 mg/Kg

MICROBIOLOGICAL PROPERTIES

Maximum limit (*Article 173, group 5.1 of the Sanitary Regulation of Foods, D.S 977/96*).

Molds	1000 UFC/g
Yeast	500 UFC/g
Salmonella in 50 g	Absence

PHYSICAL PROPERTIES

GRADING

Parameter	**Limits**
Retention on a N° 25 sieve	Max. 0.0%
Retention on a N° 40 sieve	Max. 5%
Retention on a N° 60 sieve	Max. 10%
Ground	Min. 70%

ORGANOLEPTIC PROPERTIES

Color: It should have a uniform, creamy white color

Appearance: Homogeneous mix of finely ground oat endosperm, which creates a powder of fine appearance and even color.

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

ALLERGENS

Category: Cereals that contain gluten (wheat, rye, barley, oats) and derived products.

The fraction of gluten that is harmful belongs to the group of prolamins and receives different names depending on the cereal from which it comes. For the case of Oats the prolamin is Avenina and according to analyzes carried out in an external laboratory the content of < 1.5 ppm.

Cross contamination: Yes (wheat, rye, barley)

VULNERABLE GROUP

People suffering from celiac disease or gluten intolerance.

GMO STATEMENT

(Genetically modified organisms)

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

SHELF LIFE

Oats shelf life, when stored in optimal conditions, is 18 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.

The product should be stowed ideally in plastic pallet clean and in good condition in a dry environment, protected from dust and moisture.

We suggest perimeter spaces of 60 cm that allow for proper cleaning and inspection.

PACKAGING DESCRIPTION

	Option 1	Option 2
Type of container:	Thermo-laminated polypropylene bags (*optional: interior* Polyethylene bags)	Polypropylene Maxibag
Weight	25 Kg – 50 Lb	600 Kg – 800 Kg
Color	Plain White color or White background printed (corporate design)	Blanco
Seal	Single sewing with thread, with no jumps or defects	Single sewing with thread, with no jumps or defects

The containers are closed, with no meal losses. No metal locks (hooks or clamps) are added.

Our containers comply with the regulations of safety and fitness to be used in food for human consumption.

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

Endosperm fine oat flour is recommended for use in a wide range of preparations, such as natural juices, desserts, pastries and different dishes. It is widely used within the food industry, in the production of different types of food.

In the areas where this product is used, care must be taken to avoid being exposed to microbiological contamination (molds, yeasts, salmonella, etc.), chemical or physical.

Basic preparation for oat flour:

1. Pour 6 teaspoons (40 g) of oat flour 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 METHODS

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**

It must meet a tightness condition except for the two ventilation inlets that these equipment have. It must not have light or holes or damage to the floor, walls or ceiling. It must be clean and dry at the time of loading. In addition, it must be free of pests and their remains.

The floor will be covered with polyethylene or cardboard when appropriate. Desiccants may be used (as a customer request and authorized by the commercial area) to absorb the moisture generated inside the container.

- **Open top trailer**

It must be clean and free of pests at the time of loading, must carry polyethylene covers to protect the cargo in addition to the tent, its walls and floors must be smooth and not show breakage or oxide.

The tent must be in good condition (clean and free of breakages) as well as ropes or slings.

- **Sider trucks**

It must not have light or holes or damage to the floor, walls or ceiling, it must also be clean, free of pests and without oxide stains.

- **Utility vans**

It must meet a tightness condition, it must not have light or holes or damage to the floor, walls or ceiling, it must also be clean, free of pests and without oxide stains. If the floor is grooved (refrigerators), it must be verified that it does not keep water or liquids contained in the slots.

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 (oat flour and oat 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 977/9

TRACK CHANGES

Date	Change ID	Version
05-01-2007	Document is created	00
08-04-2008	Information on sensitive group is added	01
10-06-2009	Information on sensitive group is deleted	02
13-01-2010	Information on sensitive group is added	03
23-05-2011	Review without changes	04
12-03-2012	Review without changes	05
04-06-2012	Full restructuring of the document	06
25-02-2013	Partial restructuring of the document	07
29-04-2014	Definition of n, c, m and M parameters is added as per Supreme Decree 977/96	08
19-01-2015	Maximal Aflatoxin, Zearalenone, Ochratoxin and Deoxynivalenol levels are updated as per Supreme Decree 977/96	09
18-04-2016	Review without changes	10
25-04-2017	Option of 25 Kg is added	11
22-01-2018	Information about 6aximum limits for heavy metals in oat is added (D.S 977/96)	12
22-01-2018	The information on allergens and chemical parameters is updated	12
27-03-2019	The option of packaging is included: maxisaco. The item of heavy metals is updated according to Art. 160 of the RSA.	13
09-04-2020	Product shelf life is extended from 12 to 18 months	14