MALTO

1. GENERAL INFORMATION:

Product code: 512803050
Ean code: 8435261900486
Country of origin: USA
Packed in Spain, Europe. This product has been produced in accordance with the relevant EU, local and national legislation and in compliance with the required standards for food safety and hygiene.

2. DESCRIPTION:

Tapioca maltodextrin derived from Tapioca.
Malto is a product based on maltodextrin, a carbohydrate obtained from cornstarch molecules, in this case those of tapioca, which have been broken down.

3. INGREDIENTS:

100 % Tapioca Maltodextrine. It contains **Sulphur dioxide (SO_2)**

4. FUNCTIONALITY:

Readily soluble when cold or hot. Becomes a manipulable powder when mixed with oil (2 parts Malto to 1 part oil) and dissolves completely on contact with any aqueous medium. It has low sweetening power and does not add calories.

FEATURES	BENEFITS
Free flowing powder which has extremely low bulk density	Provides high surface area suitable for adsorbing non-aqueous liquids such as oils / fats or glycerine, transforming them into a more easily handled powder format. Dry mix manufacturers benefit from higher efficiency on filling lines and standardized fill volumes.
Cold water soluble	Powders containing active ingredients or oils adsorbed Malto are immediately released when in contact with water.
Low calorific value in application	Calorific value is equivalent to that of other carbohydrates on a weight basis. It is, however, typically 1/5 to 1/10 of the calories on a volumetric basis.
Dispersant properties	Prevents lumping in dry mixes during reconstitution. Aids grinding of high oil/fatty food products into free-flowing powders.

APPLICATION AND USAGE INFORMATION:

Application summary:
Malto has been specially designed to have a very low bulk density and therefore has two main application areas. The primary use of this product is to increase the volume of dry mixes - acting as a bulking agent. Additionally, Malto can be used to absorb fats / oils helping to form a free-flowing powder.

Typical applications include:

Dry mixes: Malto acts as a dispersant for dry mixes which have a tendency to lump upon reconstitution. It is also recommended as a bulking agent to standardize fill volumes for products such as soup mixes, gravy mixes, cake and other pastry mixes; to occupy extra head-space in a package and make it easier for the consumer to measure out proper amounts.

Active ingredient powders: Malto is ideal as a dispersant for concentrated active ingredients such as sweeteners, spices and colours. The benefits to the processor are homogenously distributed and a product which is easier to handle is smaller amounts.

Free-flowing agent: The addition of Malto to any non-aqueous liquid ingredient creates a free-flowing powder which is more easily handled and easily released in water. Difficulties are always experienced when producing nut powders since they contain high levels of fat (almond~ 57%, pecans~ 72%, peanuts ~ 50%) – all can be made into powders using Malto.

Usage information: Typical usage levels vary widely depending on the function. To form a free-flowing powder, 2 parts of oil to 1 part of Malto is recommended. As a diluent for concentrated active-ingredients, Malto may be used at 0.1 gram to replace 1 gram of lactose or maltodextrine to obtain equivalent volume. In dry-mixes where Malto is used as a bulking agent, levels will vary since its purpose is to occupy extra head space in a package.

5. APPLICATION:

It is employed as a bulking agent, but can also absorb oils. Used in the food industry in the preparation of beverages, dairy products, candies, soups, and so on.
For use directions, receipts and applications see web page: www.albertyferranadria.com

6. LEGAL REQUERIMENTS:

Mycotoxins: complies with Regulation (EC) 1881/2006, as amended.

7. SHELLIFE:

24 months from date of production. If stored in proper conditions.

8. RECOMMENDED STORAGE CONDITIONS:

Store in clean, dry, well-ventilated warehouse at ambient temperature and humidity, away from odorous materials.

9. LOGISTICS AND PACKAGING INFORMATION:

Weight unit (net): 1Kg/35.2oz
Units per box: 4
Weight box: 6.80 kg
Unit dimension: High: 22.5 cm
Diameter: 29 cm
Box dimension: 60 x 30,5 x 46 cm
Box per layer: 4
Layer per palet: 3

10. SPECIFICATIONS:

Appearance: white/off - white powder.

Chemical/physical specifications

Parameter	Min	Max	Unit	Method
Moisture	-	9.0	%	Max as packed. CML 116: 4hrs, 130 ºC
pH	6.0	9.0	-	CML 100A: 5% aqueous suspension
Bulk Density	0.1	0.2	g/cc	CML 177A

Supply specification (microbiological data)
International committee for Microbiological standards for Food (ICMSF) methodology

	m	M	n	c	Unit	Method
TVC	1000	10000	5	3	g	TP4100/CML261
Yeasts	50	200	5	3	g	TP4109/CML286Y
Moulds	50	200	5	3	g	TP4109/CML268M
E. coli	-	Absent	5	0	g	TP4122/CML263
Salmonella	-	Absent	5	0	25 g	TP4119/CML264
Listeria monocytogenes	-	Absent	5	0	25g	TP4121/CML281

Thermophilic anaerobic and aerobic spores conforms to NFPA (National Food Processors Association, USA) tests NCA1 & NCA 2 (National Canners Association, USA)

Notes:
m = Good manufacturing (GMP) target value
M = maximum permissible value
n = number of samples to be taken and analyzed
c = compliance (I.e. maximum number of samples between m and M)

Pesticides: Below detection limits Organochlorine compounds, Organophosphorus compounds, P.C.B's, B.H.C's, DDT, Heptachlor, Epoxide, Dieldrin, Aldrin.
Preservative: None used
Sulphur dioxide (SO_2): typically < 10 ppm.

11. ALLERGEN INFORMATION:

	Presence	Possible cross Contamination
Cereals containing gluten and products thereof	No	X
Crustaceans and products thereof	No	
Eggs and products thereof	No	X
Fish and products thereof	No	
Peanuts and products thereof	No	
Soybeans and products thereof	No	
Milk and products thereof (including lactose)	No	X
Nuts and products thereof	No	X
Celery and products thereof	No	
Mustard and products thereof	No	
Sesame seeds and products thereof	No	X
Sulphur dioxide and sulphites	Yes	<10ppm
Lupins and products thereof	No	
Molluscs and products thereof	No	

12. NUTRICIONAL VALUE:

Average values per 100 g	Value
Energy	1663 KJ / 391 kcal
Protein	0.5g max dry basis
Carbohydrate	97g min dry basis
Of which sugars	Typically 0g dry basis
Of which starch	97g min dry basis
Fat	0.15g max dry basis
Of which saturated	0.1g max dry basis
Fibre	0 g
Salt	<0.5 g
Minerals	
Calcium (mg)	5 mg/100g, dry basis
Magnesium (mg)	2 mg/100g, dry basis
Iron (mg)	0.1 mg/100g, dry basis
Potassium (mg)	<0.1 mg/100g dry basis
Total heavy metals	
Heavy metals (mg/Kg)	10
Arsenic (mg/Kg)	1
Lead (mg/Kg)	1
Cadmiunm (mg/Kg)	0.1
Mercury (mg/Kg)	0.05

13. GMO STATEMENT:

The product is no genetically modified. The producer company has the certificate of SGS, North America, Agricultural Services, of NON-GM.

The producer fully supports the responsible use of modern biotechnology. This technology has the potential to offer significant benefits to the environment, to agriculture, to food manufacturers and to consumers.
Within this context, however, the producer recognizes that some have concerns over the use of genetically modified (GM) materials and that the food industry needs to offer the consumer a choice. The producer is, therefore, able to offer a full range of products that are traceable Identity Preserved non-GM to meet these needs.

Regular maize and the hybrids of waxy maize and high amylase maize are produced by well-accepted classical hybrid breeding methods and are non-GM. The producer confirms that it is able to ensure the complete segregation of its waxy, high amylase and regular maize products. Our audited supply chain and strict testing program assures we can offer a global supply of a range of products from non-GM sources that meet the requirements of the following European Regulations:

Regulation (EC) 1829/2003 on genetically modified food and animal feed[1] relates to the labeling of consumers products with ingredients that contain or consist of genetically modified organisms (GMO), or contain ingredients produced from GMO. These products will have to be labeled as such. It is not possible to offer any materials described as "GM-Free" because this term has not been legally defined and, theoretically, adventitious contamination can arise from cross-pollination or in handling and storage. It is important to note that these regulations do not apply to products from non-GM sources.

Regulation (EC) 1830/2003 on the traceability and labeling of GMO[2] provides a harmonized EU system on the documentation needed to trace and label GMO throughout the entire supply chain. The Regulation applies to products consisting of, or containing GMO and food and animal feed produced from GMO, at all stages of placing on the market. It applies to the traceability of the GMO event via unique identifiers. The Regulation applies to the traceability and identity preservation of the GM source.

14. IRRADIATION

The product does not undergo irradiation.

15. PRODUCT CLASSIFICATION:

CAS No	9005-25-8
EINECS No /EC No	232-697-6

Based on: Product information of the manufacturer.

Review date: 10-January-2022 Revision number: 6

Revised by:
Quality Manager
Guzman Gastronomia

Approved by:
Quality Manager
Guzman Gastronomia