




# Product Technical Specification

<b>Supplier product code</b>	01100	
<b>Version</b>	0022	
<b>Issue date</b>	13.10.2017	
<b>Range</b>	Renshaw	
<b>Product title</b>	Original Marzipan - White (without added preservative)	
<b>Product description</b>		
A traditional almond marzipan, that can be coloured or flavoured- ideal for modelling & creating sweet treats.		
<b>Pack size:</b>	5Kg e	
<b>Contacts</b>		
<b>Specifications queries</b>	<b>Email:</b>	<a href="mailto:Specifications@realgoodfoodplc.com">Specifications@realgoodfoodplc.com</a>
<b>Manufacturing Site Technical Manager</b>		
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<b>Applications information</b>		
	<b>Web address:</b>	<a href="https://www.renshawbaking.com">https://www.renshawbaking.com</a>
	<b>Contact:</b>	<a href="mailto:info@renshawbaking.com">info@renshawbaking.com</a>
<b>Sales queries</b>	<b>Email:</b>	<a href="mailto:sales@jfrenshaw.co.uk">sales@jfrenshaw.co.uk</a>
<b>Legal Compliance</b>		
This product, it's hygienic manufacture, food safety, ingredients, packaging, labelling, storage and transportation within our control, conform to all relevant UK/EU legislation in force at the date of manufacture.		
The product is warranted as per the statement included in the sales documentation at time of purchase.		
<b>GFSI Certification</b>		
<b>BRC</b>	<a href="https://www.brcdirectory.com/InternalSite//Site.aspx?BrcSiteCode=1060562">https://www.brcdirectory.com/InternalSite//Site.aspx?BrcSiteCode=1060562</a>	
Completed on behalf of JF Renshaw Ltd (A Real Good Food PLC company):		
Signed:		
Name:	Sarah Cheetham	
Position:	Specifications Technologist	
Reviewed and approved on behalf of JF Renshaw Ltd (A Real Good Food PLC company):		
Signed:		
Name:	Michael Waine	
Position:	Site Technical Manager - JF Renshaw	

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Legal name
Marzipan/ Almond Paste
Ingredients list
Sugar, <b>Almonds (Nuts)</b> (24%), Glucose Syrup, Water, Invert Sugar Syrup.
<b>Allergens:</b> Please see the ingredients in <b>bold</b> text.

Composition	Typical figures %	Countries of origin
Sugar	55 - 60	Angola, Australia, Barbados, Belize, Benin, Brazil, Burkina Faso, Colombia, Costa Rica, Dominican Republic, El Salvador, Ethiopia, Fiji, France, Guadeloupe, Guatemala, Guyana, Honduras, Ivory Coast, Jamaica, Kenya, Laos, Madagascar, Malawi, Mauritius, Mozambique, Nepal, Nicaragua, Panama, Reunion, Suriname, Swaziland, Tanzania, United Kingdom, Zambia
Bitter Almonds	4	Morocco
Sweet Almonds	20	USA, Australia, Spain
Glucose Syrup	5 - 10	UK, Netherlands
Water	1 - 5	UK
Invert Sugar Syrup	1 - 5	UK

Colour pigment	
N/A	N/A

Palm oil details	
Contains components sourced from Palm Oil/Palm Kernel Oil and/ or derivatives	No
RSPO information	N/A

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<b>Nutritional</b>	
<b>Method: Calculated</b>	<b>Typical figures per 100 g</b>
Energy (kJ/kcal)	1792 / 425
Fat (g)	13.8
of which saturates (g)	1.1
Carbohydrates (g)	68.7
of which sugars (g)	68.7
Protein (g)	6.3
Salt (g)	0.01

<b>Dietary information</b>		
	<b>Suitable for</b>	<b>Comments</b>
Vegetarians	Yes	
Vegans	Yes	
Kosher	Yes	Certified. Certificate available on request.
Halal	No	

<b>Genetically modified materials</b>
To the best of our knowledge, this product is not made from genetically modified material and does not use processing aids or additives which are genetically modified. A GM policy is available on request.
<b>Irradiated materials</b>
This product does not contain any ingredients that have been treated with ionising radiation.
<b>Nanomaterials</b>
This product does not contain any engineered nanomaterials.

<b>Shelf life: unopened</b>
18 months from date of manufacture.
<b>Shelf life: opened</b>
Once opened, material should be used in its entirety. It is the responsibility of our customers to establish the maximum permitted time until all material should be used. This will depend on their specific environment, practices and procedures.

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## Free From claims

We do not make any "Free From" claims for our products as we do not conduct any validation testing.

## Substances or products causing allergies or intolerances

Substance	Product ingredient contains?	Used on same production line?	Used in same Factory	Comments
Cereals containing gluten, wheat; rye; barley; oats; spelt; kamut and products thereof, except: wheat based glucose syrups including dextrose.	No	No	No	Exempt from allergen labelling
	Yes	Yes	Yes	
Crustaceans and products thereof	No	No	No	
Eggs and products thereof	No	Yes	Yes	Dried Egg White
Fish and products thereof	No	No	No	
Peanuts and products thereof	No	No	No	
Soybeans and products thereof	No	No	Yes	Lecithins
Milk and products thereof, including lactose	No	No	Yes	Milk, butter, and other derivatives
Nuts: Almonds; hazelnuts; walnuts; cashews; pecan nuts; Brazil nuts; pistachio nuts; macademia	Yes	Yes	Yes	Almonds
Celery and products thereof	No	No	No	
Mustard and products thereof	No	No	No	
Sesame seeds and products thereof	No	No	No	
Sulphur dioxide and sulphites > 10 mg/kg	No	No	Yes	Present in finished product at <10mg/kg
Lupin and products thereof	No	No	No	
Molluscs and products thereof	No	No	No	

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Microbiological testing		
At the time of manufacture		
Organism	Target	Maximum
TVC	<1000 cfu/g	10000 cfu/g
Yeasts & Moulds	<100	100 cfu/g
Enterobacteraceae	<10 cfu/g	50 cfu/g
Salmonella	Not detected in 25g	N/A
Osmophiles	<10 cfu/g	50 cfu/g

CLAS accredited methodology used. Test frequency based on risk assessment (JF Renshaw Ltd, in-house lab)

Chemical		
Test	Method	Standard
Moisture	Karl Fischer titration	8.0 - 9.0%

Almonds used have been tested for Aflatoxins and comply with Regulations 1881/2006: 165/2010.

Physical		
Test	Method	Standard
Appearance	Organoleptic	Ivory/cream in colour with flecks of brown visible.
Flavour	Organoleptic	A distinctive sweet almond flavour.
Texture	Organoleptic	Smooth to slightly grainy on the palate, due to the almond particles. Soft to the bite leading to a pasty, sticky mouth coating which then dissolves away.
Aroma	Organoleptic	Sweet almond

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## Brief process description

Sweet almonds are blanched, mixed with pre-blanched bitter almonds, chopped and mixed with sugar and water. The mixture is refined and roasted before onward mixing with the other ingredients. The paste is packed, checkweighed and metal detected.

## Overview of HACCP - available upon request

## Metal detection

Checked at start up, every hour and end of each packing run: 3.5mm Ferrous, 4.0mm Non-Ferrous, 5.0mm Stainless Steel test pieces.

## Sieves

Not appropriate for this product type.

## Packaging

Vacuum sealed into a red 20µm PA/ 65µm PE laminate sachet and packed into a corrugated fibreboard outer case. Outer case label applied.

25 cases per layer, 5 layers high, 175 cases per pallet. All pallets shrink/stretched wrapped.

## Recycling information

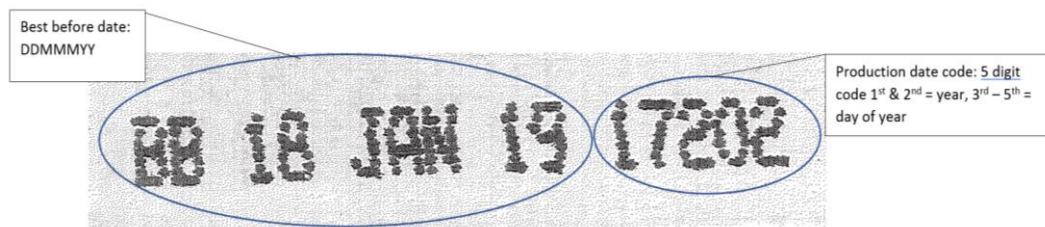
Bag - Plastic not currently recycled

Outercase - Card widely recycled

## Production date code

5 digit code. 1st & 2nd = year; 3-5 = day of the year e.g 26/08/2016 = 16238

In the event of any issues, please quote information as per example below:



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Health & safety data		
Physical Appearance	Ivory/cream almond paste.	
Ingredients	See ingredients section of the specification.	
Intended use	For bakery use.	
Storage & Handling	See specification.	
Occupational exposure hazards	None, under normal conditions of use at room temperature. Avoid eye contact.	
Fire/explosion hazard	The product will burn if ignited, but under normal conditions of use, will present no fire risk.	
First Aid	Eyes:	Flush with plenty of water. Seek medical advice if needed.
	Skin:	Wash with soap and water.
	Ingestion:	No hazard under normal conditions of use. Contains <b>nut</b> allergen.
	Inhalation:	No hazard under normal conditions of use.
Spillage	Wash area with detergent and water to avoid slip hazard.	
Disposal of waste	Normal waste disposal in accordance with local and national laws.	
Other hazards	None known.	
Protective clothing	Normal for food handling.	

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## Marzipan handling and usage instructions

Our marzipan is a paste made with a minimum of 23.5% dry almond content; other ingredients include sugar, glucose syrup, and invert syrup; colour and preservatives may also be added. (Refer to ingredients list).

## Possible applications:

Layering on cakes, Sheetting, Modelling, Chocolate Centre's, Petit Fours.

## Recommended storage

Recommended maximum storage temperatures of marzipan should be 18°C. Marzipan should be stored in dry and cool conditions, away from heat sources and odorous materials. The shelf life of marzipan products is recommended provided the packaging remains unopened and product is stored correctly. It is the responsibility of our customers to carefully consider and establish that the marzipan lasts for the required shelf life of their end products.

## Recommended handling and processing:

### a) Opening

Once opened, marzipan material should not be exposed to air for prolonged periods as product will harden and also potentially become prone to microbiological contamination.

Once opened, material should ideally be used in its entirety. It is the responsibility of our customers to establish the maximum permitted time until all material should be used. This will depend on their specific environment, practices and procedures.

### b) Handling

Before using Marzipan, ensure product has been conditioned to an ambient temperature, by gently working the product for best results.

Avoid vigorous mixing or mechanical kneading of the paste prior to use, as this can damage the texture of the product and also potentially induce microbiological contamination.

### c) Rolling out

Always use icing sugar to prevent marzipan sticking to surfaces when rolling out, avoid using an excess of icing sugar as it will cause marzipan to dry out.

When rolling out, avoid turning over sheet as it will cause stretching.

Avoid the use of flour to prevent sticking or aid sheetting, as this will potentially introduce both a microbiological and allergen issue.



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### d) Modelling

Where there is a significant amount of hand to product contact, e.g. in the preparation of models, hands must be washed and sanitised every 15 minutes; the use of a marzipan with added preservatives should be considered in these cases. Preserved products will have more tolerance from a microbiological point of view.

### e) Avoid applying water for adherence or softening

Use of boiled apricot jam is recommended to adhere marzipan to cake.

Alcohol or a clear spirit is also recommended to be applied to marzipan surface in order to soften or aid adherence of an icing layer.

Do not use tap water to soften or aid adherence of an icing layer, cooled boiled water should be used.

In order to avoid cross contamination, always ensure utensils used to apply jam or alcohol are clean.

### Rework

Ideally marzipan should not be reworked back into virgin product.

It is the responsibility of our customers to carefully consider and establish that any re-work material is fit for purpose and the maximum permitted time until all material should be used when using it, depending on their specific environment, practices and procedures.

### Water activity

The imbalance of water activity between the various components of a cake will cause moisture migration to the marzipan layer. This should be considered during the development of any products.

### Things to be aware of:

Under normal circumstances marzipan is not subject to spoilage from yeasts or moulds due to its high sugar content.

Moreover the bitter content of marzipan recipes is also believed to inhibit yeast growth, with the bitter element providing some preservative effect.

However low levels of yeast and mould may be present, under certain circumstances these yeasts or mould may result in spoilage, demonstrated by fermentation or surface mould growth. Normally spoilage can be seen, visible mould or swelling bags from gas production.

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### Circumstances which can contribute to yeasts or mould growth and create spoilage include:

Incorrect storage temperature of marzipan, e.g. too hot above 18°C.

Incorrect storage conditions, e.g. high humidity.

Incorrect establishment as to whether the marzipan material will last for the required shelf life of users finished products.

Use of marzipan material that has been exposed to air for prolonged periods.

Vigorous mixing or mechanical kneading of the paste.

Cross contamination from other products (e.g. cake crumb) and ingredients (e.g. jam or flour).

Addition of old marzipan or contaminated rework back into virgin product.

The use of flour to prevent sticking or aid sheeting.

Applying tap water for adherence or softening.

The imbalance of water activity between the various components of a cake.

Unhygienic factory equipment and surfaces.

**It should be noted that this is not a full and exhaustive list of factors that can affect yeast or mould growth in marzipan but they are the ones of main concern.**