

# **Product Technical Specification**

1.	Product	
Culina	Culinary Plain Flour	

2.	Product Code
60025	

3.	Bag Size
16kg	

4.	Description
A whi	ite flour for pastry making

5. Milling Process	
Roller Milled	

6.	. Extraction Rate (Average)	
75%		

# 7. Ingredients (Declared) Flour (Wheat Flour, Calcium, Iron, Niacin, Thiamin)

8.	Undeclared Processing Aid
None	

9. Analytical Parameters					
	Method	Unit	Target	Range	
Protein	NIR	%	9.5	8.6 – 10.5	
Moisture	NIR	%	14.0	13.1 – 14.8	
Fallling Number	Hagberg	sec	>220	>220	
Colour Grade	Kent Jones		1.5	<2.0	
Water Absorption	Farinograph	%	54.0	Not tested every batch	

10.	Physical Standards and Characteristics		
A free	A free flowing off white powder. No distinct aroma or flavour.		

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#### 11. Shelf Life

270 days from date of packing

# 12. Storage

Cool dry conditions suitable for food storage

## 13. Country of Origin of Wheat

UK - Red Tractor Accredited

If the quality and availability of the UK harvest is not sufficient, the Red Tractor accreditation for this product will be withdrawn and wheat from other sources used; the logo will be removed from packaging.

14. Nutritional Information		
Typical Values		Per 100g
Energy	kJ	1473
Energy	Kcal	347
Fat	g	1.1
Of which: saturates	g	0.3
Carbohydrates	g	72.7
Of which: sugars	g	2.2
Fibre	g	2.9
Protein (N x 6.25)	g	10.2
Salt (Na x 2.5)	g	<0.01

15. Packaging				
Item	Barcode	Material		
16kg Dack	5011259043453	Two layer Food Grade Paper Bag (120g) Widely Recycled		
16kg Pack		Cotton		
Stretchwrap	-	IDPE		
Pallet	-	Wood/Plastic		

16. Labelling		
BEST BEFORE: DD/MM/YY	MMA DD VVVV - Packing Date	
PACKED: MMM DD YYYY	MM DD YYYY – Packing Date	
BAG: AXXXX	AXXXX – Bag No.  XXXXX – Batch Code (5 digit number)	
BATCH: XXXXX	AAAAA — Batcii Code (5 digit ildilibei)	

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#### 17. Allergens

Wheat gluten is present in all products. Other cereal glutens such as barley and spelt may be present. No other allergens are used within the flour mill

The products on the flour mill are produced without the addition of soya in a mill which does not process soya but within a supply chain which handles soya and where a risk may exist. **nabim 2014.** 

Egg, Maize, Soya, Fishmeal, Milk powder, Sesame and Peanuts are used or stored on site in a separate factory and warehouse

#### 18. Microbiological

Marriage's Millers flour products are not manufactured to a microbiological specification, but we do operate a surveillance programme to monitor the microbial level of wheat. The microbial level in the flour will typically reflect the levels found naturally occurring in the wheat and this will vary from harvest to harvest. Flour is intended for further thermal processing and therefore should be cooked before eating

## 19. Mycotoxins

Marriage's Millers operates a surveillance programme for potential contaminants of wheat and flour. We also participate in collaborative industry surveys, via nabim. The results of this testing demonstrates compliance with the legal limits

Wheat Flour		
Deoxynivalenol (DON)	750 ppb	
Zearalenone (ZON)	75 ppb	
Ochratoxin A (OTA)	3 ppb	
Cadmium	0.1mg/kg	
Lead	0.2 mg/kg	

In addition to this, intakes of wheat into the mill are assessed and a DON test will be carried out if required.

#### 20. Pesticide Residues

Selected cereals and cereal flours are tested every six months

#### 21. Other Contaminant Testing

We participate in nabim/HGCA contaminant monitoring surveys throughout the year which include heavy metal testing.

#### 22. Genetically Modified Policy

We are not aware of any GM wheat or rye that is commercially available.

The ingredients used in the production of our flours are from non GM sources.

To the best of our knowledge the flours, bran and wheatfeed that we produce are GM free.

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23. H	ACCP		
We opera	We operate a HACCP system based on codex alimentarius to ensure food safety.		
Our multi	idisciplinary team are all qualified to Intermediate HACCP level three.		
CCP1	Wheat and Goods Intake – Visual Inspection for Foreign Bodies, Taint and Infestation		
CCP2A	Inspection of control sieve (finest 1.1mm)		
ССРЗА	Packing line metal detection tests. (Fe – 3.0mm, Non Fe -3.0mm, Stainless Steel – 3.5mm)		

24. Product Safety Data Sheet for Wheat Flour					
Product:	•	Wheat flour is produced by milling cleaned wheat grain or endosperm of			
		leaned wheat grain.			
Uses:	Flour is r	nainly used in the manufact	cure of bread.		
Legislation:	Act. (EC)	s produced so as to comply with the requirements of the Food safety C) No 1169/2011, Calcium carbonate purity meets the criteria under o 231/2012			
Delivery:		usually supplied either by bu of 1.0kg up to 25kg.	ılk tanker or in paper bags of various		
Static Electricity:	electricit	eumatic intake of flour from bulk tankers can give rise to static sity. Accordingly, it is essential for blowlines to be earthed; suitable g points must be provided at the discharge point.			
Manual Handling	be the su	All manual handling operations, including those involving flour bags, should be the subject of a risk assessment appropriate to the environment and the physical characteristics of the handlers.			
Storage:		In bulk, flour should be stored at ambient temperature in dry bins. Bagged flour should be stored in cool, dry conditions.			
Health:	has no a Hazardo below, i personal	In normal use, rye flour does not present a serious health risk and ingestion has no adverse effects. However, to comply with the Control of Substances Hazardous to Health Regulations and for the general health reasons outlined below, it is necessary to reduce — so far as is reasonably practicable — personal exposure to any dust through enclosure, ventilation and the provision and use of any personal protective equipment.			
<ul> <li>Inhalation: Flour dust may cause asthmatic reactions in a small proportion of susceptible employees. The health of employees exposed to dust should be monitored and any necessary action taken.</li> <li>Eyes: Flour dust may cause discomfort and the eyes should be washed with running water. Medical advice should be sought if the discomfort persists.</li> <li>Skin: Flour can have a drying effect on the skin but is only very rarely, if ever, the cause of dermatitis.</li> </ul>					
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Dust formation should be minimised during handling to prevent inhalation and skin contact. Overalls and dust respirators are recommended when handling loose materials. Spillages should be removed without delay to maintain hygiene standards and to minimise the level of dust in the atmosphere. Vacuum cleaning should be used wherever possible. High standards of personal hygiene should be maintained to avoid the possibility of dermatitis or product contamination.

#### Fire / Explosion:

Like most organic materials, flour dust is flammable. Although not especially combustible, in certain circumstances flour can form explosive clouds if ignited. The following precautions should be taken to minimise this risk:

- Adequate extraction facilities should be provided in all areas subject to dust.
- Care should be taken to prevent the formation of dust clouds in storage and conveying plant.
- Potential sources of ignition should be avoided.
- Silos and appropriate equipment, including blowlines, should be earthed to prevent ignition by electrostatic discharge.
- Adequate explosion venting should be fitted to silos and other appropriate equipment.
- Smoking must be prohibited near storage and handling areas.
- Build-up of dust on beams and ledges should be prevented as this represents a potential dust cloud.

Further information on this matter is available in:

"The prevention of dust explosions in flour mills and bulk flour containers", nabim, 21 Arlington Street, London. SW1A 1RN.

#### **TECHNICAL DATA**

Particle Size:

Particles range from 2.5mm down to smaller than 250 microns. 78% of particles are smaller than 250 microns.

**Specific Heat:** 

0.42 kcal/kg°C (Wheat flour)

**Explosive** 

**Concentrations** 

Above 50 g m<sup>-3</sup>. (Wheat flour)

Ignition Temperature A cloud of wheat flour in air can be ignited by surfaces at temperatures of 400 °C. Layers of flour on a hot surface can smoulder at temperatures of 200

°C, leading to flames and ignition.

**Minimum Ignition** 

A cloud of wheat flour in air requires an minimum ignition energy of 300MJ. This is the lowest value obtained with a number of flour types.

Kst Values Comprehensive tests on flour indicate a range of Kst between 74 and 137 bar m s<sup>-1</sup> depending on particle size distribution and moisture content.

**Density** Wholemeal Flours (Wheat): circa 520 kg m<sup>-3</sup>

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## 25. Relevant Accreditations

**British Retail Consortium** 

Campden Laboratory Accredition Scheme / nabim intake scheme

## 26. Disclaimer

W & H Marriage and Sons Ltd warrant to supply flour conforming to the above specification. In taking flour conforming to this specification you agree that it is suitable for your requirements.

27. Specification Authorisation	
	Simon Fortis Technical Manager
	23 <sup>rd</sup> December 2020

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