

MARRIAGE'S

THE MASTER MILLERS

W&H Marriage and Sons Ltd, Chelmer Mills, New Street, Chelmsford Essex CM1 1PN
 Telephone: 01245 354455, Fax: 01245 261492, Email: floursales@marriagesmillers.co.uk, Web: www.flour.co.uk

Product Technical Specification

1. Product
 Strong Organic Wholemeal Flour

2. Product Code
 60034P

3. Bag Size
 16kg

4. Description
 A bread making organic wholemeal flour, milled on a traditional French Burr stone mill

5. Milling Process
 Stone Milled

6. Extraction Rate (Average)
 100%

7. Ingredients (Declared)
 Organic **Wheat** Flour

8. Undeclared Processing Aid
 Fungal Alpha Amylase, Xylanase

9. Analytical Parameters	<i>Method</i>	<i>Unit</i>	<i>Target</i>	<i>Range</i>
Protein	NIR	%	12.5	11.7 - 13.2
Moisture	NIR	%	13.5	12.5 – 14.5
Falling Number	Hagberg	sec	>250	>250
Water Absorption	Farinograph	%	62	Not routinely tested
Particle Size	69.0 – 75.0% of particles less than 250 µm			

10. Physical Standards and Characteristics
 White free flowing powder with bran particles of varying sizes. Free from off taints or odours.

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11 Shelf Life

180 days from date of packing

12. Storage

Cool dry conditions suitable for food storage

13. Country of Origin of Wheat

UK, European and Asian
 (May contain wheats from other sources depending on the quality and availability of the UK harvest)

14. Nutritional Information

<i>Typical Values</i>		<i>Per 100g</i>
Energy	kJ	1427
Energy	Kcal	338
Fat	g	2.3
Of which: saturates	g	0.5
Carbohydrates	g	70.2
Of which: sugars	g	2.8
Fibre	g	10.7
Protein (N x 6.25)	g	14.4
Salt (Na x 2.5)	g	Trace

15. Packaging

<i>Item</i>	<i>Barcode</i>	<i>Material</i>
16kg Pack	5011259043613	Two layer Food Grade Paper Bag (120g) Widely Recycled Cotton
Stretchwrap	-	IDPE
Pallet	-	Wood/Plastic

16. Labelling

BEST BEFORE: DD/MM/YY PACKED: MMM DD YYYY BAG: AXXXX BATCH: XXXXX	MM DD YYYY – Packing Date AXXXX – Bag No. XXXXX – Batch Code (5 digit number)
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17. Allergens

Wheat gluten is present in all products. Other cereal glutes 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 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. HACCP	
We operate a HACCP system based on codex alimentarius to ensure food safety. Our multidisciplinary team are all qualified to Intermediate HACCP level three.	
CCP1	Wheat and Goods Intake – Visual Inspection for Foreign Bodies, Taint and Infestation
CCP2B	Inspection of control sieve (finest 4mm)
CCP3A	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 cleaned wheat grain.
Uses:	Flour is mainly used in the manufacture of bread.
Legislation:	Flour is produced so as to comply with the requirements of the Food safety Act.
Delivery:	Flour is usually supplied either by bulk tanker or in paper bags of various weights of 1.0kg up to 25kg.
Static Electricity:	The pneumatic intake of flour from bulk tankers can give rise to static electricity. Accordingly, it is essential for blowlines to be earthed; suitable earthing points must be provided at the discharge point.
Manual Handling:	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:	<p>In normal use, 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.</p> <p>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.</p> <p>Eyes: Flour dust may cause discomfort and the eyes should be washed with running water. Medical advice should be sought if the discomfort persists.</p> <p>Skin: Flour can have a drying effect on the skin but is only very rarely, if ever, the cause of dermatitis.</p>

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Hygiene:	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:	<p>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:</p> <ul style="list-style-type: none"> • 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. <p>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.</p>
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 ⁻³ . (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 a 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 ⁻¹ depending on particle size distribution and moisture content.
Density	Wholemeal Flours (Wheat): circa 520 kg m ⁻³

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25. Relevant Accreditations

British Retail Consortium
Campden Laboratory Accreditation 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 6 th March 2023
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