

Heygates Ltd Flour Specification



Product Name

Customer Name

Cust Ref

N.P. BREADMAKING

THOMAS RIDLEY FOODSERVICE

RID120

Description Of Flour

A smooth free flowing white flour that shall be free from hard lumps or foreign matter. The flour shall be free from any off taints or odours and shall have a neutral cereal taste.

2022 Harvest

| _ | | |
|-------|------|---------|
| FI | A | I |
| FIGUR | Δna | IVCIC |
| Flour | Alla | I V 313 |

| ur Analysis | | | | |
|-----------------------------------|-------|------|---------|------------------|
| Method | Rai | nge | Method | |
| NIR PROTEIN (Dumas N x 5.7 as is) | 11.7 | 12.9 | HEY 014 | |
| NIR MOISTURE (90 MINS @130C) | Max | 15.0 | HEY 014 | 7 |
| NIR FLOUR COLOUR GRADE | Max | -1.0 | HEY 014 | <u>o</u> |
| FALLING NUMBER | 280.0 | Min | HEY 06 | 0 |
| | | | | ontrolle lopy |
| | | | | onti Copy |
| | | | | 80 |
| | | | | Un |
| | | | | * |

| *The product analysis data is obtaine | d using historical data and | d could be subject to change at harvest |
|---------------------------------------|-----------------------------|---|
|---------------------------------------|-----------------------------|---|

| Shelf Life & | 365 Days FLOUR IS A RAW INGREDIENT AND MUST BE COOKED OR BAKED BEFORE EATING | | | | |
|--------------|--|---|----------------------------------|--|--|
| Storage | Flour should be stored in cool, well ventilated and pest-free areas away from direct sunlight. | | | | |
| | | | | | |
| | We reserve the right to source wheat fr | om the global market to ensure consistent quality | Countries of origin | | |
| Ingredients | Wheat | | UK, GER, POL, FRA, SWE, CAN, USA | | |
| Stat Adds | Calcium Carbonate (E170), | Iron, Niacin, Thiamine | FR, USA, IND, CHN, SWE | | |
| Compliance | EC No. 1925/2006 & EC1169/ | C No. 1925/2006 & EC1169/2011 + UK Bread & Flour Regulations 1998 | | | |

Alpha amylase to supplement that naturally present, and ascorbic acid may be added, which are considered processing aids

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Page 2 of 7 **HQ Address** Heygates Ltd Add 1 The below sites are approved to supply Add 2 **Bugbrooke Flour Mills** Add 3 Bugbrooke N.P. BREADMAKING Flour name: Add 4 Northants NN7 3OH Sales & Technical Mervin Poole THOMAS RIDLEY FOODSE To: **Quality Manager** David Bailey **Export Declarations** Heygates EORI No. GB119291076 **Approved Sites For The Supply Of This Product** Add 1 Heygates Ltd, Tring Add 1 Heygates Ltd, Bugbrooke Add 2 New Mill Add 2 **Bugbrooke Flour Mills** Add 3 Tring Add 3 Bugbrooke Herts HP23 4JN Add 4 Add 4 Northants NN7 3QH Tel No. 01442 823311 Tel No. 01604 830381 Fax No. 01442 890283 Fax No. 01604 831865 Grade Grade The milling of white, wholemeal and brown wheat The milling of wheat flours including heat treated Scope Scope flours and co-products, for retail (1.5kg flour bags flour, blended bread mixes and other wheat up to 16kg sacks) and industrial (sack-packed and derived products, including co-products, for bulk tanker) supply. Cert No. ESP 21707. industrial supply (sack packed and bulk tanker). Cert No. ESP 23255. **BRC** validation **Site Code Site Code** BRC validation **BR@S** Directory BR@S Directory 1220543 (pls click icon) 1127834 **Food Safety Controls - Critical Control Points** Sieve Size 1mm Blow Line Metal Detection 1.0Fe, 1.0Nfe, 2.0SS Bag Metal Detection 2.5Fe, 2.5Nfe, 3.0SS The flour will be free from foreign bodies

| Packaging | | | | | | | |
|------------------|---------|----------|-------------|--------------------|---------------|-------------|------------|
| Size of bag | 16Kg | Bag Dim. | 320x135x720 | Prim | ary Packaging | Brown Paper | Sack |
| | | Thread | White | | | Pallet Con | figuration |
| Weight | 120 gms | | Secondary P | ackaging Spin wrap | No. | per layer | 5 |
| | | | | | | 13 | |

| Microbiological | Indicative | levels from industry su | rvey | |
|--------------------------------------|------------|---------------------------|------------|------------|
| Aerobic Total Viable Count (cfu/g) | >300,000 | Presumptive Bacillus cere | us (cfu/g) | 200 |
| Yeasts & Moulds (cfug) | 17,600 | Listeria spp (count) | | <10 |
| Presumptive Coliforms (cfu/g) | >1,500 | Salmonella | | Abs in 25g |
| Presumptive Escherichia coli (cfu/g) | 30 | Frequency of tests | Post har | vest |

It is possible albeit unlikely that levesl can exceed those listed above

We consider the product stable and to be low risk microbiologically. However, the product should pass through Micro **Analysis** a validated heat treating process i.e. cooking before final consumption.

Mycotoxin / Pesticide Residue Tests

Wheat Ochratoxin A; DONS; ZONS Pesticide Residue

All wheat and wheat derivatives meet current EU legislation **Frequency of Test**

Annually at harvest followed by risk assessment.

HGCA Project Typical results available on request

| | | | | | Q1: Is the allergen declared on the packaging label | |
|--|------------------|------------------|---------------------|--|--|--|
| | | Q1 | Q2 | Q3 | O2. Is this allowen used within the same production facility | |
| Cereals contai | ning gluten | YES | YES | N/A | Q2: Is this allergen used within the same production facilit | |
| Crustaceans | | NO | NO | NO | Q3: Is there a risk of adventitious cross contamination | |
| Eggs | | NO | NO | NO | | |
| Fish | | NO | NO | | Produced without the addition of soya, in a mill which doe | |
| Peanuts | | NO | NO | | not process soya, but within a supply chain which handles | |
| Soyabeans | | NO | NO | | soya. | |
| Milk | | NO | NO | NO | | |
| - | onds, hazelnuts) | NO | NO | NO | | |
| Celery | | NO | NO | NO | | |
| Mustard | | NO | NO | NO | | |
| Sesame | la 0 audab | NO | NO | NO | | |
| • | le & sulph^ >10 | NO | NO | NO | | |
| Lupin Molluscs | | NO | NO | NO | | |
| | information (per | NO | NO Typical | NO | | |
| Nutritionari | Water (g) | 1009) | Typical 11.7 | 1 | Magnesium (mg) 26.0 | |
| ₹ (0 | Total Nitrogen |) (a) | 2.0 | - | Phosphorus (mg) 128.0 | |
| ^{tfg} , δ (| Protein (g) | 1 (9) | 11.3 | 1 | Iron (mg) 1.9 | |
| Source https://www.g | Fat (g) | | 1.2 | 1 | Copper (mg) 0.2 | |
| ν _{og.} » ι | Av Carbohydra | ate (a) | 79.2 | 1 | Zinc (mg) 0.8 | |
| v.ı.k. — | Energy (kcal) | ate (g) | 353.0 | 1 | Chloride (mg) 98.0 | |
| McCance uk/government/pu | Energy (KJ) | | 1504.0 | | Manganese (mg) 0.7 | |
| ing ar | Starch (g) | | 78.7 | | Selenium (ug) 9.0 | |
| adytus SO | Total Sugars (| (a) | 0.5 | 1 | Iodine (ug) TR | |
| ublic 📀 | Gluc (g) | .37 | TR | 1 | Retinol (ug) 0.0 | |
| ation. | Fruct (g) | | TR | | Carotine (ug) 0.0 | |
| & Widdowsons | Sucr (g) | | 0.4 | | Vitamin D (ug) 0.0 | |
| do o | Saturates (g) | | 0.3 | 1 | Vitamin E (mg) 0.4 | |
| WS | Malt (g) | | TR | 1 | Thiamine B1 (mg) 0.3 | |
| of or | Lact (g) | | 0.0 | | Riboflavin B2 (g) 0.0 | |
| જુ-i ા | Fibre AOAC (g | 1) | 3.3 | NSP (g) | | |
| 7th ∹integrat | Satd (g) | | 0.3 | | Tryptophan/60 (mg) 2.3 | |
| ai de m | Mono-unsatd | | 0.2 | | Vitamin B6 (mg) 0.2 | |
| dit data | Poly-unsatd (g | 9) | 0.3 | | Vitamin (B12 (ug) 0.0 | |
| Source - McCance & Widdowsons 7th Edition https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid | Trans (g) | | TR | | Folates (ug) 16.0 | |
|) Cofid | Cholest-erol (ı | mg) | 0.0 | | Pantothenate (mg) 0.3 | |
| | Sodium (mg) | | 2.0 | | Biotin (ug) 1.0 | |
| | Potassium (m | g) | 166.0 | | Vit C (mg) 0.0 | |
| | Calcium (mg) | | 134.0 | | | |
| | | | | | | |
| | Suitable For | | 7 | Pest Co | | |
| Vegetarian | <u> </u> | Yes | 4 | | utine visits 26 | |
| Vegans | - | Yes | 1 | | | |
| Coeliacs | | No | 4 | Scope of pest Control: | | |
| Kosher Halal | _ | Yes Certified | 4 | Rodents & moth plus 24hr call out Contractor: Check Pest Control, Reading, Berkshire. | | |

Heygates Food Safety Policies

Genetic Modification

At this time no genetically modified wheat has been authorised in the EU for commercial cultivation, nor for import into the EU. UK Flour Millers (The National Association of British and Irish Millers) continue to monitor the developments in the areas of labelling and patenting of agricultural food products derived from GMO's and keep its members informed of any developments. Regulations (EC) 1139/98 and 49/2000, and the new regulations (EC) 1829/2003 and 1830/2003 on the compulsory labelling in foodstuffs of products derived from GMO's, do not apply and additional specific labelling is not required.

Nut Policy

Heygates Ltd do not process any nut or seed products at any of our flour production facilities. Flour is produced in a sealed system and conveyed by means of an enclosed pneumatic pipe to bulk storage where it can either be discharged into dedicated bulk flour tankers or packed into flour sacks.

COSHH

1: Product: N.P. BREADMAKING

Details below are for wheat flour - the worse case scenario

2: Composition/Information on Ingredients

Wheat Flour is produced by milling cleaned wheat grain or endosperm of cleaned wheat grain.

Flour is mainly used in the manufacture of bread, biscuits, confectionery, other foodstuffs and for various industrial purposes.

3: Hazards Identification

This product is not classified as hazardous to health according to EC directive.

8 hr TWA STEL

MEL(maximum exposure limit) 10 mg/m³ 30 mg/m³

In normal use wheat flour does not present a serious health risk and ingestion has no adverse effects. To comply with the Control of Substances Hazardous to Health Regulations and the assigned MEL, and for general health reasons outlined below, it is necessary to reduce so far as reasonably practicable personal exposure to any dust through enclosure, ventilation and the provision and use of personal protective equipment.

4: First Aid Measures

Inhalation: Flour dust may cause asthmatic reactions in a small proportion of susceptible employees. Remove affected person from area of exposure preferably into fresh air. Anyone who has asthmatic symptoms from an exposure to dust should seek medical advice. The symptoms normally disappear if the sufferer avoids further exposure

Eyes: Flour dust may cause discomfort and the eyes should be washed with running water. Medical advice should be sought if the discomfort persists.

Skin: Flour can have a drying effect on the skin. For hygiene reasons it should be cleaned from broken skin to reduce risk of infection. There should be no adverse response from exposure to skin. It is only very rarely, if ever, the cause of dermatitis (see 8. Exposure and Controls below).

5: Fire Fighting Measures

Extinguish with Water (Red) or Foam (Cream).

Extinguish with Powder (Blue) should there be an electrical risk or electrical fire, when water and foam should not be used.

Extinguish with Foam (Cream) or Powder if burning liquids are involved.

Use of CO₂ (Black), particularly large trolley-mounted extinguishers, may incur risk of generating an ignitable dust cloud.

6: Accidental Releases

Flour should be swept up, do not allow to enter drainage system, do not hose down.

Vacuum cleaners must be spark free and earthed. Vacuuming is the preferred method of cleaning. Brushes should preferably be of the type with coloured nylon bristles.

Compressed air is not suitable for cleaning jobs. It is dangerous and it spreads the problem to areas which are harder to clean and possibly into unexpected sources of ignition.

7: Handling and Storage

In bulk, flour should be stored at ambient temperatures in dry bins. Bagged flour should be stored in cool, dry conditions. Flour is usually supplied either by bulk tanker or in paper bags.

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 risk assessment appropriate to the environment and the physical characteristics of the handlers.

8: Exposure and Controls

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. It is unusual for contact with clean flour dust to cause dermatitis however high standards of personal hygiene should be maintained to avoid the possibility of dermatitis or product contamination.

9: Physical and Chemical Properties

White free flowing powder.

Particle Size

Will vary with flour type. E.g., in white flour a large majority of particles will be smaller than 150 μ m, 50% of particles being smaller than 50 μ m. For fine cake flours, about 50% of particles will be below 25 μ m. In wholemeal flour, some particles will be greater than 300 μ m.

Specific Heat

0.42 J/gm C.

Explosive Concentrations

Above 50 g/m². (Upper explosive limit concentrations are not well defined for combustible dusts.) Ignition Temperatures

A cloud of flour in air can be ignited by surfaces at temperatures of about 400 °C. Layers of flour on a hot surface can smoulder at around 200 °C, leading to flame and ignition.

Kst Values

Comprehensive tests on flours indicate a range between 74 and 120 bar m/s, depending on the flour type, particle size and moisture content. (The limit for the least severe class of explosible dusts, St1, is 200 bar m/s and this figure is often used for determining suitable vent size.) Density Usually between 450 and 560 kg/m³.

10. Fire and Dust Explosion Hazards

Like most organic materials, flour dust is flammable. Although not especially combustible, in certain conditions flour can form dust clouds which, if ignited, can lead to a dust explosion. The following precautions should therefore be taken:

• 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 prevention or protection 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 – representing a potential dust cloud if dislodged - should be prevented, • Electrical equipment should be of the type suitable for flammable dusts

Further advice on this matter is contained in the technical data below and in "The Prevention of Dust Explosions in Flour Mills and Bulk Flour Containers", available from UK Flour Millers.

11. Toxicological Information

This product is non-toxic.

Ingestion: Safe for human ingestion.

Inhalation: Repeated exposure may cause sensitisation and asthma (see 8. Exposure and

control)

Eye: May cause discomfort as a foreign body/matter.

Skin: Slight drying of skin. May cause dermatitis in rare cases

12. Ecological Information

None available at this time

13. Disposal Considerations

Dispose of according to national and local regulations.

14. Transport Considerations

This product is not classified as dangerous goods.

15. Regulatory Information

The product is produced so as to comply with the prevailing requirements of the Food Safety Act and the Bread and Flour Regulations.

EH 40 Risk Phrases: none EH 40 Safety Phases: none

16. Other Information

Under COSHH Regulations the user is under a legal obligation to carry out sultable and sufficient assessment of the health and safety risks which this material may present.

Reference should be made to:

Occupational Exposure Limits EH40/current year

Preventing Asthma at Work L55

Handling of Combustible Dusts HSE 103

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of issue below. The information is for guidance in safe handling, use, storage, transportation, disposal and release and is not in itself a warranty or quality specification. The information relates only to the products identified. This Material Safety Data Sheet may not be valid for such product used in combination with other substances or processes which must be assessed separately.

HACCP - Process Flow Diagram

| Process | Status | Checks / | |
|-----------------------------|--|--|--|
| 1100033 | Status | Monitoring | |
| Wheat Intake | PRE REQ - pesticide, moisture, taint & infestation | All wheat is sampled and positively released | |
| Wheat Storage | | | |
| Wheat Conditioning | CP - micro hazard from mains water | Water tested for micro content every year | |
| Wheat Cleaning | | | |
| Milling | | Daily detector tests and rejects sampled | |
| Metal Detector | CCP - metal contamination | 1.0Fe, 1.0Nfe, 2.0SS | |
| Final Sieve | CCP - foreign body contamination | Sieve integrity and overtail checks | |
| Storage | | | |
| Packing | | 2 hrly bag metal detector checks | |
| Bag Metal Dec | CCP - metal contamination | 2.5Fe, 2.5Nfe, 3.0SS | |
| Palletisation & Despatch | | | |
| Bulk Outloading | | | |
| Despatch | CP - Tanker hygiene | Tanker cleaning schedule | |