# SAFETY DATA SHEET : MALT

## SECTION 1: Identification of the substance/mixture and company/undertaking

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| 1.1 | **Product identifier** | **Malt**<br>Malted cereals (barley, wheat, rye, oats, triticale), including roasted. |
| 1.2 | **Relevant identified uses of the substance or mixture and uses advised against** | Foodstuff; used primarily as an ingredient in the brewing, distilling, baking and cereal industries.<br>Uses advised against: not available. |
| 1.3 | **Details of the supplier of the safety data sheet** | Crisp Malt, Great Ryburgh, Fakenham, Norfolk, NR21 7AS<br>+44(0)1328 829391<br>info@crispmalt.com |
| 1.4 | **Emergency telephone number** | +44(0)1328 828328 (0800-1700 Monday to Friday) |

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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|---|---|
| Classification according to UN GHS | Non-hazardous food product.<br>This product does not meet the criteria for classification in any hazard class according to UN GHS criteria.<br>It is not mandatory to supply a safety data sheet, but this document contains information and advice concerning safe handling of the product. |

### 2.2 Label elements

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| Pictogram | None. |
| Signal word | None. |
| Hazard statements | None. |
| Precautionary statements | None. |

### 2.3 Other hazards

Long-term exposure to grain dust may cause respiratory sensitisation (asthma).

Cereals containing gluten, eg wheat, rye, barley, oats, spelt or their hybridized strains and products are known to cause sensitisation (eg allergy and coeliac disease).

Malt dust may form explosive/flammable mixtures with air in the presence of a source of ignition.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| *Declarable components* | *Conc. (wt%)* | *EC No.* | *CAS No.* |
|---|---|---|---|
| None | | | |

| | | | |
|---|---|---|---|
| *Other components* | | | |
| Malt | 100 | Not available | Not available |

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

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| Inhalation | If inhalation occurs, remove exposed person to fresh air and keep warm and at rest in a position comfortable for breathing. For difficulties in breathing, wheezing, respiratory irritation, or other symptoms, call a doctor. |
| Skin | Wash affected area with soap and water. Call a doctor if irritation, rash, or other symptoms occur. |
| Eye | If in eyes, rinse with room-temperature water or eyewash for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a doctor if irritation persists. |
| Ingestion | If swallowed, rinse mouth thoroughly and give water to drink. Do not induce vomiting, unless instructed by medical personnel. Call a poison centre or doctor if patient is unwell. |

**4.2 Most important symptoms and effects, both acute and delayed**

Long-term exposure to grain dust may cause respiratory sensitisation (asthma).

Cereals containing gluten, eg wheat, rye, barley, oats, spelt or their hybridized strains and products are known to cause sensitisation (eg allergy and coeliac disease).

Dust may irritate eyes or skin.

See also Section 11.

**4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptoms as they occur.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

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| Suitable | Water spray, foam, powder. |
| Unsuitable | Not available. |

**5.2 Special hazards arising from the substance or mixture**

The product is not classified as flammable, but may combust on heating or with fire.

Malt dust may form explosive/flammable mixtures with air in the presence of a source of ignition.

If involved in a fire, product will burn and decompose producing hazardous smoke, vapours and gases.

**5.3 Advice for firefighters**

Remove product from fire or cool containers with water spray. Firefighters should wear self-contained breathing apparatus and full protective clothing.

Prevent water from firefighting from entering water-courses or drainage system.

## Section 6: Accidental release measures

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| **6.1 Personal precautions, protective equipment and emergency procedures** | For large spills, wear full personal protection. Keep unauthorised personnel from the spillage area. Ventilate area and avoid creating airborne dust.<br>Dusty material may be dampened with water to prevent it becoming airborne.<br>Take precautionary measures against static discharge and use non-sparking equipment. Follow prescribed procedures for responding to large spills and reporting to appropriate authorities. |
| **6.2 Environmental precautions** | Prevent product from entering water courses or drainage system. |
| **6.3 Methods and material for containment and cleaning up** | Clean up spill as soon as possible. Do not flush to sewer.<br>For small quantities, wipe off with damp cloth or paper.<br>For large quantities, carefully sweep up or collect using vacuum cleaner.<br>Wash contaminated surfaces with water and detergent. Collect waste, washings, and contaminated materials for safe disposal. |
| **6.4 Reference to other sections** | For recommended personal protective equipment, see Section 8.<br>For disposal considerations, see Section 13. |

## SECTION 7: Handling and storage

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| **7.1 Precautions for safe handling** | Avoid skin and eye contact with the product, and inhalation of dust. Use only in a well-ventilated area. See Section 8 for engineering controls and personal protection.<br>Wash hands after use. Do not eat, drink or smoke when using this product.<br>Since there is a possibility of dust explosion, avoid generating airborne dust during handling, and keep work areas clean.<br>Visible dust clouds, layers of dust on floors, ledges and equipment, or dust leaking from machinery indicate that action is required reduce dust at source.<br>Keep away from ignition sources, including heat, flame and sparks to prevent ignition of dust–air mixture. Electrical equipment must be explosive-proof and electrically grounded.<br>Silos and equipment should be fitted with explosion relief vents. |
| **7.2 Conditions for safe storage, including any incompatibilities** | Stores should be suitable for foodstuffs, cool, dry and protected from contamination with birds, insects and vermin.<br>Do not store with chemicals. |
| **7.3 Specific end use(s)** | Not available. |

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

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|---|---|
| EU limit values | None. |
| National limit values (UK) | Grain dust: WELs: Refer to current limits in national guidance (Workplace exposure limits – EH40 (hse.gov.uk) |
| Monitoring procedure | For employees regularly exposed to grain dust, we recommend regular health checks to monitor breathing and lung function. |

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| Other: human health (DNELs, DMELs) | Not available. |
| Other: environmental (PNEC) | Not available. |

### 8.2 Exposure controls

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| Engineering controls | Good general ventilation (5 air exchanges per hour) is recommended in the workplace. If processing creates dust, then local exhaust ventilation is recommended.<br>Reduce exposure to airborne grain dust to as low as is reasonably practicable and, in any case, below the workplace exposure limit.<br>Take precautionary measures against static discharge. |
| Personal protective equipment | The need for personal protective equipment should be based on a workplace risk assessment for the particular use.<br>Avoid skin and eye contact by wearing gloves (eg nitrile rubber) and eye protection. Where more extensive contact may occur, wear protective clothing (eg apron, overalls).<br>A dust mask may be required if the product becomes airborne. FFP3 grade mask is recommended (HSE)<br>PPE should conform to current national standards. Consult PPE manufacturers concerning breakthrough times applicable to your particular use. |
| Environmental exposure controls | Not available. |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
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| (a) | Physical state | Solid granular |
| (b) | Colour | Pale brown, golden orange to very dark/black, depending upon type |
| (c) | Odour | Slight, characteristic, and according to flavour profile from specification |
| (d) | Melting/freezing point | Not available |
| (e) | Boiling point or initial boiling point and boiling range | Not available |
| (f) | Flammability | Not available |
| (g) | Lower and upper explosion limit | Dust explosion characteristics: combustion energy: ca. 19 MJ/kg (for whole grains); minimum ignition temperature: 260–280°C; minimum explosible concentration: 30 g/m$^3$; minimum ignition energy: 35 mJ |
| (h) | Flash point | Not applicable to solid |
| (i) | Auto-ignition temp. | Ca. 220°C (for whole grain). |
| (j) | Decomposition temp. | Not available |
| (k) | pH | Not available |
| (l) | Kinematic viscosity | Not applicable to solid |
| (m) | Solubility | Not soluble in water (slowly decomposes by microbial action) |
| (n) | Partition coeff. n- | Not available |

| | | |
|---|---|---|
| | octanol/water (log value) | |
| (o) | Vapour pressure | Not available |
| (p) | Density or rel. density | 0.47 to 0.71 tonnes/$m^3$, depending upon type |
| (q) | Relative vapour density | Not available |
| (r) | Particle characteristics | Not available |
| **9.2** | **Other information** | Angle of repose: 26° from the horizontal. |

## SECTION 10: Stability and reactivity

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| **10.1 Reactivity** | Not available. |
| **10.2 Chemical stability** | Stable under recommended storage and handling conditions. |
| **10.3 Possibility of hazardous reactions** | Not available. |
| **10.4 Conditions to avoid** | Avoid microbial deterioration of product through dampness, and contamination from with birds, insects and vermin. |
| **10.5 Incompatible materials** | Strong acids, alkalis, and oxidising agents. |
| **10.6 Hazardous decomposition products** | Not available. |

## SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

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|---|---|---|
| (a) | Acute toxicity | Based on available data on the ingredients, the classification criteria are not met.<br>Malt is a food product.<br>The toxicity of the product may depend on any contamination, including with bacteria, fungal spores, microbial toxins, insects, mites and their excreta, and pesticide and fertiliser residues. |
| (b) | Skin corrosion/irritation | Based on available data on the ingredients, the classification criteria are not met.<br>Malt flour and dust has a drying effect and can be an irritant in prolonged contact. |
| (c) | Serious eye damage/irritation | Based on available data on the ingredients, the classification criteria are not met.<br>Malt dust and husk can cause discomfort. |
| (d) | Respiratory or skin sensitisation | Long-term exposure to grain dust may cause respiratory sensitisation (asthma) with coughing, wheezing and chest tightness.<br>Cereals containing gluten, eg wheat, rye, barley, oats, spelt or their hybridized strains and products are known to cause sensitisation (eg allergy and coeliac disease). |
| (e) | Germ cell mutagenicity | Based on available data, the classification criteria are not met. |
| (f) | Carcinogenicity | Based on available data, the classification criteria are not met. |
| (g) | Reproductive toxicity | Based on available data, the classification criteria are not met. |
| (h) | STOT-single exposure | Grain dust: Short-term effects include: coughing and breathing |

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| | difficulties; watery or prickly eyes (conjunctivitis); runny or stuffy nose (rhinitis); grain fever/organic dust toxic syndrome (a short-lived 'flu-like' illness). |
| (i) STOT-repeated exposure | Grain dust: Long-term effects may lead to serious respiratory complaints, including: chronic bronchitis (cough and phlegm production); chronic obstructive pulmonary disease (a long-term illness that makes breathing difficult); farmer's lung (increasing shortness of breath and weight loss). |
| (j) Aspiration hazard | Based on available data, the classification criteria are not met.<br>No relevant ingredient has been classified for this effect. |
| **11.2** Information on other hazards | Not available. |

## SECTION 12: Ecological information

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|---|---|
| **12.1 Toxicity** | Based on available data, the classification criteria are not met. |
| **12.2 Persistence and degradability** | Biodegradable food product. |
| **12.3 Bioaccumulative potential** | Not expected to bioaccumulate. |
| **12.4 Mobility in soil** | Not expected to be mobile in soil. |
| **12.5 Results of PBT and vPvB assessment** | No ingredients have been identified as PBT or vPvB. |
| **12.6 Endocrine disrupting properties** | Not available. |
| **12.7 Other adverse effects** | The product is not classified as hazardous to the ozone layer. |

## SECTION 13: Disposal considerations

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| **13.1 Waste treatment methods** | May be disposed of in landfill,incineration, composting or anaerobic digestion. |

## SECTION 14: Transport information

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| **14.1 UN Number** | Not classified as dangerous goods for transport. |
| **14.2 UN proper shipping name** | Not applicable. |
| **14.3 Transport hazard class(es)** | Not applicable. |
| **14.4 Packing group** | Not applicable. |
| **14.5 Environmental hazards** | Not classified as marine pollutant/environmentally hazardous. |
| **14.6 Special precautions for user** | Not available. |
| **14.7 Maritime transport in bulk according to IMO instruments** | Not applicable. |

## SECTION 15: Regulatory information

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| **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** | Malt is produced from non-genetically modified raw materials according to the regulation (EC) No 1829/2003 and (EC) No 1830/2003.<br>Cereals containing gluten, eg wheat, rye, barley, oats, spelt or their hybridized strains and products are known to cause hypersensitivity (allergy and coeliac disease) and are usually declared on product labels (Section 4.2.1.4 of the Codex Alimentarius General Standards for the Labelling of Prepackaged Foods).<br>Labelling in a prescribed manner may be required on packaged foods made with these cereals or their malted derivatives in some countries. |
| **15.2 Chemical safety assessment** | Not available. |

## SECTION 16: Other information

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| Revisions | This SDS is the first version in EU format. |
| Abbreviations | DMEL, derived minimum effect level; DNEL, derived no-effect level; PNEC, predicted no-effect concentration; STOT RE, specific target organ toxicity, repeated exposure; STOT SE, specific target organ toxicity, single exposure. |
| References | Grain dust; Guidance Note EH66 (Third edition); HSE.<br>Control of exposure to grain dust; an employee's guide; HSE.<br>Supplier Technical Data Sheet. |
| Basis of classification | The classification of the substance has been assessed according to the criteria given in the UN GHS (Globally Harmonized System of Classification and Labelling; Eighth Revised Edition; United Nations; 2019. |
| List of hazard statements | None. |