

# Product Safety Data Sheet

## Great Western Malting – Malted Grains and grain dust

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

#### Product Identifier

**Substance name:** Malted Grain and grain dust

#### Intended Use of the Product

**Use of the substance/mixture:** Ingredient for brewing and distilling and food manufacturing.

#### Name, Address, and Telephone of the Responsible Party

##### Company

Great Western Malting  
18110 SE 34<sup>th</sup> Street, Suite 240  
Vancouver, WA 98683  
360 991 0888 [www.greatwesternmalting.com](http://www.greatwesternmalting.com)

<b>Manufacturer(s)</b> Great Western Malting Company 1705 NW Harborside Drive Vancouver, WA, USA 98660	Great Western Malting 1666 Kraft Road Pocatello, ID USA 83204	
<b>Emergency Telephone Number</b>	360-693-3661	

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### GHS-US classification

Comb. Dust

#### Label Elements

##### GHS-US labeling

**Signal word (GHS-US):** Warning

**Hazard statements (GHS-US):** May form combustible dust concentrations in air. Malt dust may form explosive/flammable mixtures with air in the presence of a source of ignition.

#### Other Hazards

Inhalation may aggravate those with pre-existing conditions including: skin, eye, and respiratory conditions.

#### Unknown acute toxicity (GHS US)

Not available



### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Substance**

Name: Superior Pale Malt Full text of H-phrases: see section 16

Name	Product Identifier	% (w/w)	GHS-US classification
Barley Malt	RR-04853-3	100	Comp. Dust
Grain, Dust	RR-00014-6	100	Comp. Dust

### **SECTION 4: FIRST AID MEASURES**

#### **Description of First Aid Measures**

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur, go into open air and ventilate suspected area.

**Skin Contact:** Rinse with plenty of water.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** Rinse mouth. Do NOT induce vomiting.

#### **Most Important Symptoms and Effects Both Acute and Delayed**

**General:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation:** Prolonged inhalation of dust may cause respiratory irritation.

**Skin Contact:** Dust may cause irritation in skin folds or by contact in combination with tight clothing.

**Eye Contact:** Dust from this product may cause minor mechanical eye irritation.

**Ingestion:** None under normal use.

**Chronic symptoms:** May cause obstructive pulmonary disease, chronic bronchitis, asthma, and grain fever after long exposures.

May cause respiratory sensitization and other respiratory problems in some individuals.

#### **Indication of Any Immediate Medical Attention and Special Treatment Needed**

If you feel unwell, seek medical advice (show the label where possible).

### **SECTION 5: FIREFIGHTING MEASURES**

#### **Extinguishing Media**

**Suitable extinguishing media:** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media:** Do not use a heavy water stream. Use of heavy water stream may spread fire.

#### **Special Hazards Arising From the Substance or Mixture**

**Fire hazard:** Combustible Dust. Dust explosion hazard in air. Supports combustion at high temperatures. Under conditions of fire this material may produce: Carbon dioxide and/or Carbon monoxide. The product is not classified as flammable, but may combust on heating or with fire.

**Explosion hazard:** Avoid dust clouds in combination with static electricity. Dust clouds can be explosive.

**Reactivity:** Stable at ambient temperature and under normal conditions of use.

#### **Advice for Firefighters**

**Precautionary measures fire:** Not available

**Firefighting instructions:** Exercise caution when fighting any chemical fire. Do not allow run-off from firefighting to enter drains or water courses.

**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

**General measures:** Avoid generating dust. Handle in accordance with good industrial hygiene and safety practice. Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation.

#### **For Non-Emergency Personnel**

**Protective equipment:** Use appropriate personal protection equipment (PPE).

**Emergency procedures:** Evacuate unnecessary personnel.

#### **For Emergency Personnel**

**Protective equipment:** Equip cleanup crew with proper protection.

**Emergency procedures:** Ventilate area.

#### **Environmental Precautions**

Prevent entry to sewers and public waters.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Precautions for safe handling:** Take precautionary measures against static discharge. 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.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work

#### **Conditions for Safe Storage, Including Any Incompatibilities**

**Storage conditions:** Keep only in the original container in a cool, well ventilated place away from: Direct sunlight, heat sources, and ignition sources. Keep container closed when not in use. Protect from moisture.

**Incompatible materials:** Strong acids. Strong bases. Strong oxidizers

**Specific End Use(s)** Ingredient.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

Grain dust (oat, wheat, barley) (RR-00014-6)		
<b>USA ACGIH</b>	ACGIH TWA	4 mg/m <sup>3</sup>
<b>USA OSHA</b>	OSHA PEL (TWA)	10 mg/m <sup>3</sup>
<b>United Kingdom HSE</b>	PEL (TWA)	10 mg/m <sup>3</sup>
<b>Canada COHSR</b>	PEL (TWA)	10 mg/m <sup>3</sup>

### **Exposure Controls**

**Appropriate engineering controls:** Provide adequate ventilation to minimize dust concentrations. Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed.

**Personal protective equipment:** Dust formation: dust mask. Gloves. Protective goggles



**Materials for protective clothing:** Not available

**Eye protection:** Chemical goggles or safety glasses.

**Skin and body protection:** Not available

**Respiratory protection:** Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.

**Other information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical state	Solid
Appearance	Dust, pale brown to black
Odour	Mild Bean-like
Odour threshold	Not available
pH	6-8 (0.5% Soln)
Relative evaporation rate (butylacetate=1)	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Not available
Auto-ignition temperature	Ca. 220°C (for whole grain)
Decomposition Temperature	Not available
Flammability (solid, gas)	Not available
Lower flammable limit	Not available
Upper flammable limit	Not available
Vapour Pressure	Not available
Relative vapour density at 20 oC	Not available
Relative Density	0.47 to 0.71 tonnes/m <sup>3</sup> , depending upon type
Specific gravity density	Not available
Solubility	Not available
Log Pow	Not available
Log Kow	Not available
Viscosity, kinematic	Not available
Viscosity, dynamic	Not available
Explosion data – sensitivity to mechanical impact	Dust explosion characteristics: combustion energy: ca. 19 MJ/kg (for whole grains) minimum ignition temperature: 260–280°C minimum explosible concentration: 30 g/m <sup>3</sup> minimum ignition energy: 35 mJ
Explosion data – sensitivity to static discharge	Not available
Other information	Angle of repose: 26° from the horizontal

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Stable at ambient temperature and under normal conditions of use.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Protect from moisture. Use good housekeeping practices during storage, transfer, and handling, to avoid excessive dust accumulation.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>)

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **Information on Toxicological Effects -Product**

**Acute toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin corrosion/irritation:** Not classified **pH:** 6-8 (0.5% Soln)

**Serious eye damage/irritation:** Not classified **pH:** 6-8 (0.5% Soln)

**Respiratory or skin sensitization:** Long-term exposure to grain dust may cause respiratory sensitisation (asthma).

**Germ cell mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific target organ toxicity (repeated exposure):** Not classified

**Reproductive toxicity:** Not classified

**Specific target organ toxicity (single exposure):** Not classified

**Aspiration hazard:** Not classified

**Symptoms/injuries after inhalation:** Prolonged inhalation of dust may cause respiratory irritation.

**Symptoms/injuries after skin contact:** Dust may cause irritation in skin folds or by contact in combination with tight clothing.

**Symptoms/injuries after eye contact:** Dust from this product may cause minor eye irritation.

**Symptoms/injuries after ingestion:** None under normal use.

### **Information on Toxicological Effects -Ingredient(s)**

**LD50 and LC50 Data:** Not available

## **SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity:** Not available

### **Persistence and Degradability**

<b>Barley Malt</b>	
Persistence and degradability	Not established

### **Bioaccumulative Potential**

<b>Barley Malt</b>	
Bioaccumulative potential MAGB document indicates: Not expected to bioaccumulate.	Not established

**Mobility in Soil:** Not available

### **Other Adverse Effects**

**Other information:** Avoid release to the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste disposal recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

In accordance with ICAO/IATA/DOT/TDG

**UN Number:** Not classified as hazardous

**UN Proper Shipping Name:** Not classified as hazardous

**Additional information:** Not classified as hazardous

**Overland transport:** Not classified as hazardous

**Transport by sea:** Not classified as hazardous

**Air transport:** Not classified as hazardous

## SECTION 15: REGULATORY INFORMATION

### US Federal regulations

This product or its components are not listed on any US federal regulatory lists

### US State regulations

Grain dust (barley, oat, rye, wheat) (RR-00014-6)	
<b>State or local regulations</b>	U.S. -Massachusetts -Right To Know List U.S. -Minnesota -Hazardous Substance List U.S. -New Hampshire -Regulated Toxic Air Pollutants -Ambient Air Levels (AALs) -24-Hour U.S. -New Hampshire -Regulated Toxic Air Pollutants -Ambient Air Levels (AALs) -Annual U.S. -Pennsylvania -RTK (Right to Know) List U.S. -Texas -Effects Screening Levels -Long Term U.S. -Texas -Effects Screening Levels -Short Term

### Canada Federal regulations

This product or its components are not included on any Canadian regulatory lists.

## SECTION 16: OTHER INFORMATION

**Data sources** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Comb. Dust	Combustible Dust
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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*