Product Safety Data Sheet
Canada Malting Munich Malt

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

Product Identifier
Substance name: Malted Barley

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
GrainCorp Malt
700 Washington Street
Suite 508
Vancouver, WA 98660
360 991 0888 www.graincorpmalt.com

Manufacturer(s)
Great Western Malting Company
1705 NW Harborside Drive
Vancouver, WA, USA 98660

Canada Malting Company
3316 Bonnybrook Road SE
Calgary, AB, Canada T2G4M9

Bairds Malt Ltd.
Station Maltings
Witham, Essex, United Kingdom, CM8 2DU

Barrett Burston Malting
15 Gough Street Richmond Victoria,
Australia, 3121

Schill Malz
Ludwig Sewamb Strasse 67574
Osthofen, Germany

Emergency Telephone Number
Emergency number 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

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: Munich Malt Full text of H-phrases: see section 16

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% (w/w)</th>
<th>GHS-US classification</th>
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<tbody>
<tr>
<td>Barley Malt</td>
<td>RR-04853-3</td>
<td>100</td>
<td>Comp. Dust</td>
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<tr>
<td>Grain, Dust</td>
<td>RR-00014-6</td>
<td>100</td>
<td>Comp. Dust</td>
</tr>
</tbody>
</table>

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.

**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.
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/PERSOAL PROTECTION

Control Parameters

<table>
<thead>
<tr>
<th></th>
<th>USA ACGIH</th>
<th>ACGIH TWA</th>
<th>USA OSHA</th>
<th>OSHA PEL (TWA)</th>
<th>United Kingdom HSE</th>
<th>PEL (TWA)</th>
<th>Canada COHSR</th>
<th>PEL (TWA)</th>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>4 mg/m³</td>
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<td>10 mg/m³</td>
<td></td>
<td>10 mg/m³</td>
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</table>

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.

Product
Munich Malt

Issue Date
September 19, 2016

Revision
01
Other information: When using, do not eat, drink or smoke.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

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<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Dust, brown to black</td>
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<tr>
<td>Odour</td>
<td>Mild Bean-like</td>
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<tr>
<td>Odour threshold</td>
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</tr>
<tr>
<td>pH</td>
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<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
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<tr>
<td>Melting point</td>
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<td>Boiling point</td>
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<td>Flash point</td>
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<td>Auto-ignition temperature</td>
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<td>Decomposition Temperature</td>
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<td>Flammability (solid, gas)</td>
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<td>Lower flammable limit</td>
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<td>Vapour Pressure</td>
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<tr>
<td>Log Kow</td>
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<td>Viscosity, kinematic</td>
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<tr>
<td>Viscosity, dynamic</td>
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<tr>
<td>Explosion data – sensitivity to mechanical impact</td>
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<tr>
<td>Explosion data – sensitivity to static discharge</td>
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</table>

### 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, CO2)
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: Not classified
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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence and degradability</th>
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<td>Barley Malt</td>
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Bioaccumulative Potential

<table>
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<th>Ingredient</th>
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</thead>
<tbody>
<tr>
<td>Barley Malt</td>
<td>Not established</td>
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</table>

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

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

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:

<table>
<thead>
<tr>
<th>Comb. Dust</th>
<th>Combustible Dust</th>
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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.