

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 04/17/2018 Reviewed on 04/02/2018

ldentification

· Product Identifier

· Trade Name: Malt

Relevant identified uses of the substance or mixture and uses advised against:

Brewing, Food and Distilling Industry Ingredient

· Product Description: Malted Grains

· Details of the Supplier of the Safety Data Sheet:

Manufacturer/Supplier: Rahr Malting Company 800 West 1st Avenue Shakopee, MN 55379 Phone: (952) 445-1431

· Emergency telephone number: (952) 445-1431

2 Hazard(s) Identification

· Classification of the substance or mixture:

Combustible Dust May form combustible dust concentrations in air.

- · Label elements:
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: Non-Regulated Material
- Signal word: Warning
- Hazard statements:

May form combustible dust concentrations in air.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 1

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 01 Fire = 1

· Hazard(s) not otherwise classified (HNOC): None known

3 Composition/Information on Ingredients

- · Chemical characterization: Substance
- · CAS No. Description Barley and/or Wheat

First-Aid Measures

- · Description of first aid measures
- General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- Information for doctor
- · Most important symptoms and effects, both acute and delayed: No further relevant information available.



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· Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5 Fire-Fighting Measures

- · Extinguishing media
- Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: No further relevant information.
- Special hazards arising from the substance or mixture:

Malt and/or malt dust can be combustible and wet malt in storage can also combust.

- · Advice for firefighters
- · Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

Additional information:

Dust from malt can be combustible. Handling of malt will generate dust in the atmosphere. Approved housekeeping methods and removal of ignition sources will reduce the hazards.

6 Accidental Release Measures

· Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Keep away from heat/sparks/open flames and hot surfaces. No smoking.

- Environmental precautions: Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up:

Dispose of the collected material according to regulations.

· Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

7 Handling and Storage

- · Handling
- · Precautions for safe handling: Keep away from heat/sparks/open flames and hot surfaces. No smoking.
- · Information about protection against explosions and fires:

Malt and/or malt dust can be combustible and wet malt in storage can also combust.

- Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles:

Store in a cool, dry and well ventilated space. Do not allow to get wet in storage.

- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.



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· **Specific end use(s):** Ingredient in the brewing, food and distilling industry.

8 Exposure Controls/Personal Protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters:
- · Components with occupational exposure limits:
- · Additional information: The lists that were valid during the creation of this SDS were used as basis.
- Exposure controls:
- · Personal protective equipment
- · Breathing equipment: Dust mask (if facility dust control systems are inadequate)
- · Protection of hands: Not required.
- · Eye protection: Safety glasses are recommended if high dust concentrations are present.

9 Physical and Chemical Properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Powder/granular

Color: Brown
Odour: Sweetish

Odor threshold: Not determined.pH-value: Not applicable.

· Change in condition

Melting point/Melting range: Not determined. Boiling point/Boiling range: Not determined.

· Flash point: None

• Flammability (solid, gaseous): Product is not flammable.

· Ignition temperature: Cloud - 430°C / Layer - 220°C

Decomposition temperature: Not determined.Auto igniting: Not determined.

· Danger of explosion: Dry or powdered ingredients are combustible. Dispersal of finely

divided dust from products into air may form mixtures that are ignitable and/or explosive. Minimize airborne dust generation and

eliminate sources of ignition.

Explosion limits:

Lower: Not determined.Vapor pressure: Not applicable.

• **Density @ 20 °C (68 °F):** 0.49 g/cm³ (4.089 lbs/gal)

Relative density:

 Vapor density:
 Evaporation rate:

 Not determined.
 Not applicable.

· Solubility in / Miscibility with:

Water: Soluble.



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· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic: Not applicable. **Kinematic:** Not applicable.

Organic solvents: 0.0 %

· Other information: No further relevant information available.

10 Stability and Reactivity

- · Reactivity: No further relevant information available.
- · Chemical stability: Stable under normal conditions.
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions: No dangerous reactions known.
- · Conditions to avoid: Moisture, Heat Sources
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products:

Normally none - However wet grain products can decompose generating heat.

11 Toxicological Information

- Information on toxicological effects:
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification: No data available.
- · Primary irritant effect:
- On the skin: No irritating effect.
- · On the eye: Mild irritant effect.
- Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification.

· Carcinogenic categories:

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration):

Substance is not listed.

* 12 Ecological Information

- · Toxicity:
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability: No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- Additional ecological information:
- · General notes:

Not known to be hazardous to water.

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

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- · Results of PBT and vPvB assessment:
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects: No further relevant information available.

13 Disposal Considerations

- · Waste treatment methods
- · Recommendation:

Observe all federal, state and local environmental regulations when disposing of this material.

- Uncleaned packagings
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

· UN-Number:

· DOT, ADN, IMDG, IATA
Non-Regulated Material
Non-Regulated Material

Not Regulated

· UN proper shipping name:

· DOT, ADR/ADN, ADN, IMDG, IATA Non-Regulated Material

· Transport hazard class(es):

· DOT, ADR/ADN, ADN, IMDG, IATA

· Class: Non-Regulated Material

· Packing group:

· DOT, ADR/ADN, IMDG, IATA Non-Regulated Material

Environmental hazards:
 Special precautions for user:
 Not applicable.

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code: Not applicable.

· UN "Model Regulation": Non-Regulated Material

15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture:
- SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is not listed.

· TSCA new (21st Century Act) (Substances not listed)

Barley and/or Wheat

- · California Proposition 65:
- · Chemicals known to cause cancer:

Substance is not listed.

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· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

New Jersey Right-to-Know List:

Substance is not listed.

New Jersey Special Hazardous Substance List:

Substance is not listed.

· Pennsylvania Right-to-Know List:

Substance is not listed.

· Pennsylvania Special Hazardous Substance List:

Substance is not listed.

· Carcinogenic categories:

EPA (Environmental Protection Agency):

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH):

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health):

Substance is not listed.

· GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: Non-Regulated Material
- · Signal word: Warning
- · Hazard statements:

May form combustible dust concentrations in air.

· National regulations:

Non-Regulated Material

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

· Date of preparation / last revision: 04/17/2018 / 4

· Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent





Safety Data Sheet (SDS) OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

* Data compared to the previous version altered.

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106