

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 04.19.2022

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Vital wheat gluten

SECTION 1: Identification

Product Identifier

Product Name: Vital wheat gluten

Synonyms: Gluvital™ 21020 * Gluvital™ 21040



Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Food and feed use.

Uses Advised Against: Not determined or not applicable.

Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Supplier:

United States

Cargill Incorporated
15407 McGinty Rd W
Wayzata, MN 55391
1-800-227-4455

Emergency Telephone Number:

United States

VelocityEHS (formerly ChemTel, Inc)
1-800-255-3924 (North America)
+1-813-248-0585 (International)

SECTION 2: Hazard(s) Identification

GHS Classification:

Combustible Dust

Label elements

Hazard Pictograms: None

Signal Word: Warning

Hazard statements:

Combustible Dust May form combustible dust concentrations in air.

Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P233 Keep container tightly closed

P240 Ground/bond container and receiving equipment

P302+P352 IF ON SKIN: Wash with plenty of soap and water

P314 Get medical advice/attention if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P501 Dispose of contents and container in accordance with local, regional, national, and international regulations.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
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CAS Number: 93384-22-6	Vital wheat gluten	Proprietary
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Additional Information:

The manufacturer has claimed the exact percentage as trade secret under the OSHA Hazard Communication Standard.

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

After Inhalation:

If symptomatic, move to fresh air. Get medical attention if symptoms persist.

After Skin Contact:

Wash off with soap and water. Get medical attention if irritation develops and persists.

After Eye Contact:

Do not rub eyes. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.

After Swallowing:

Rinse mouth. Get medical attention if symptoms occur.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Dusts may irritate the respiratory tract, skin and eyes.

Delayed Symptoms and Effects:

Not determined or not applicable.

Immediate Medical Attention and Special Treatment

Specific Treatment:

Treat symptomatically.

Notes for the Doctor:

Provide general supportive measures and treat symptomatically.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Apply extinguishing media carefully to avoid creating airborne dust.

Avoid high pressure media which could cause the formation of a potentially explosive dust-air mixture.

Unsuitable Extinguishing Media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific Hazards During Fire-Fighting:

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.

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Special Protective Equipment for Firefighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special precautions:

Use standard firefighting procedures and consider the hazards of other involved materials.

May form combustible dust concentrations in air.

In the event of fire, cool tanks and containers exposed to flames with water spray until after the fire is out.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Use only non-sparking tools. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Environmental Precautions:

Avoid discharge into drains, water courses or onto the ground.

Methods and Material for Containment and Cleaning Up:

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Following product recovery, flush area with water.

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use with adequate ventilation. Eliminate all sources of ignition. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid direct contact with eyes.

Conditions for Safe Storage, Including Any Incompatibilities:

Keep away from heat, sparks and open flame. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Dust	N/A	PEL: 5 mg/m ³ (Respirable fraction)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Dust	N/A	PEL: 15 mg/m ³ (Total Dust)
	Dust	N/A	TWA: 5 mg/m ³ (Respirable fraction)
	Dust	N/A	TWA: 15 mg/m ³ (Total Dust)
ACGIH	Dust	N/A	TWA: 3 mg/m ³ (Respirable particles)
	Dust	N/A	TWA: 10 mg/m ³ (Inhalable particles)

Biological Limit Values:

No biological exposure limits noted for the ingredient(s).

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protection Equipment

Eye and Face Protection:

Wear safety glasses with side shields (or goggles).

Skin and Body Protection:

Hand protection: Wear suitable gloves. Suitable gloves can be recommended by the glove supplier.

Other: Wear suitable protective clothing.

Wear appropriate thermal protective clothing, when necessary.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

General Hygienic Measures:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Powder, grain, or pellet: Off-white.
Odor	Mild.
Odor threshold	Not determined or not available.
pH	4.5 - 7 in aqueous solution.

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Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Combustible dust.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Partially soluble in water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other Information

Minimum Ignition Energy (MIE)	>120 mJ at normal moisture level.
Pmax	8 bar
Kst	60 - 100 bar m/s
Dust explosion class	1 Weak explosion (St 1).

SECTION 10: Stability and Reactivity

Reactivity:

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical Stability:

Material is stable under normal conditions.

Possibility of Hazardous Reactions:

No dangerous reaction known under conditions of normal use.

Conditions to Avoid:

Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimize dust generation and accumulation.

Incompatible Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

No hazardous decomposition products are known.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data: No data available.

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Skin Corrosion/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Prolonged skin contact may cause temporary irritation.

Substance Data: No data available.

Serious Eye Damage/Irritation

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Direct contact with eyes may cause temporary irritation.

Substance Data: No data available.

Respiratory or Skin Sensitization

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Respiratory sensitization: No sensitizing effects known.

Skin sensitization: May cause allergic reaction in persons sensitive to wheat proteins.

Substance Data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Species	Result
	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Substance Data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Vital wheat gluten	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Vital wheat gluten	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Substance Data: No data available.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Not expected to be hazardous.

Substance Data: No data available.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Excessive exposure to dust, may cause irritation to upper respiratory tract (nose and throat).

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Substance Data: No data available.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

Not an aspiration hazard.

Substance Data: No data available.

Information on Likely Routes of Exposure:

Inhalation: Dust may irritate respiratory system.

Skin Contact: Dust or powder may irritate the skin.

Eye contact: Dust may irritate the eyes.

Ingestion: Not expected to be acutely toxic.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

Dusts may irritate the respiratory tract, skin and eyes.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment:

This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product Data: No data available.

Substance Data: No data available.

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data: No data available.

Persistence and Degradability

Product Data: No data available.

Substance Data: No data available.

Bioaccumulative Potential

Product Data: No data available.

Substance Data: No data available.

Mobility in Soil

Product Data: No data available.

Substance Data: No data available.

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

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Other Adverse Effects:

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal Considerations

Disposal Methods:

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Local disposal regulations: Dispose in accordance with all applicable regulations. Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packages:

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Maritime Dangerous Goods (IMDG)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

SECTION 15: Regulatory Information

United States Regulations

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Inventory Listing (TSCA): Not listed. For food and animal feed only.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances: None of the ingredients are listed.

SARA Section 313 Toxic Chemicals: None of the ingredients are listed.

CERCLA: None of the ingredients are listed.

RCRA: None of the ingredients are listed.

Section 112(r) of the Clean Air Act (CAA): None of the ingredients are listed.

Massachusetts Right to Know: None of the ingredients are listed.

New Jersey Right to Know: None of the ingredients are listed.

New York Right to Know: None of the ingredients are listed.

Pennsylvania Right to Know: None of the ingredients are listed.

California Proposition 65: None of the ingredients are listed.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

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Additional information:

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

End of Safety Data Sheet