SAFETY DATA SHEET

Section 1 – Product and Company Identification

Material Name - Oat Flour
Chemical Category - Food Ingredient

Manufacturer - Ardent Mills, LLC; Ardent Mills, ULC: Molinos de Puerto Rico, LLC
1875 Lawrence Street
Denver, CO 80202
www.ardentmills.com

Telephone - Call your Ardent Mills' Customer Service Rep
General Emergency - ChemTel 1-800-255-3924

Preparation Date - 6/9/2022
Last Revision Date 11/3/2022

Section 2 – Hazards Identification

Emergency Overview

Hazard Category: Combustible Dust
Signal Word: Warning
Hazard Statements: May form combustible dust concentrations in air. The fine dust dispersed in air may ignite.

Classification according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS):
Hazards Not Otherwise Classified Combustible Dust

Section 3 – Composition/Information on Ingredients

Non-Hazardous Components					
Chemical Name	CAS-No	**%(weight)**	**LD50/LC50**	**Classifications According to Regulation/Directive**	**Comments**
Oat Flour	134134-86·	100%	NDA		

Section 4 – First Aid Measures

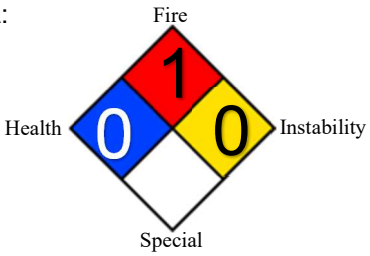
Inhalation - Get medical attention if symptoms occur. Remove to fresh air.
Skin - No data available.
Eye - Get medical attention if symptoms occur. If contact with eyes directly, flush with gently flowing fresh water thoroughly.
Ingestion - Get medical attention if symptoms occur.

Section 5 – Fire Fighting Measures

Extinguishing Media - Dry chemical, CO2, foam or water fog.
Unsuitable Extinguishing Media - High pressure water spray may cause a combustible dust cloud.
Firefighting Procedures - FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: ALWAYS stay away from tanks engulfed in fire. LARGE FIRES: Move containers from fire area if can accomplish without risk.
Unusual Fire & Explosion Hazards - Fine dust (typically less than 420 microns) associated with this product may represent a combustible dust hazard. Ignition energy (Kst value) vary with particle size.
Hazardous Combustion Products - None known
Protection of Firefighters - Wear positive pressure self-contained breathing apparatus (SCBA).
Flash Point - Not relevant.
Explosion Limits
Upper - Not relevant
Lower - Not relevant
Auto-Ignition Temperature - 390 to 500^{o} F (199 to 260^{o} C)

Response - When responding to explosion or any subsequent fire, DO NOT use high pressure extinguishing agent as this may spread the dust and may create an additional ignitable dust cloud.

NFPA:



Section 6 – Accidental Release Measures

Personal Precautions - No data available.
Emergency Procedures - Keep unauthorized personnel away.
Environmental Precautions - Avoid run off to waterways and sewers.
Containment/Clean-up Measures - Carefully shovel or sweep up spilled material and place in suitable container. Use appropriate Personal Protective Equipment (PPE)
Prohibited Materials - No data available.

Section 7 – Handling and Storage

Handling - Follow good manufacturing practices when handling this product. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. 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. Refer to NFPA 61: Standard for the Prevention of Fires and Dust Explosions in the Agricultural and Food Processing Facilities

Storage - No data available.
Special Packaging Materials - None required.
Incompatible Materials or Ignition Sources - None known.

Section 8 – Exposure Controls/Personal Protection

Personal Protective Equipment
Respiratory - Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator is exposure limits are exceeded or symptoms are experienced.
Eye/Face - Protective safety glasses recommended.
Hands - No data available.
Skin/Body - None required for normal handling.
General Industrial Hygiene Considerations - Persons who handle grain products must follow good hygienic practices (i.e. wash frequently, and wear clean clothing)
Engineering Measures/Controls - Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Exposure Limits/Guidelines			
	Result	**ACGIH**	**United States - California**
Milled Oat Products as Flour dust	TWAs	0.5 mg/m3 TWA (inhalable fraction) *as Flour dust*	0.5 mg/m3 PEL *as Flour dust*

Exposure Control Notations
ACGIH – Milled Wheat Products as Flour dust: Sensitizers
Exposure Limits Supplemental
ACGIH – Milled Wheat Products as Flour dust: TLV Basis – Critical Effects: (asthma, bronchitis, upper respiratory tract irritation)
Environmental Exposure Controls
No data available

Section 9 – Physical and Chemical Properties

Material Description			
Physical Form	Free flowing powder	**Appearance/Description**	No data available.
Color	Light tan to white	**Odor**	No data available.
Taste	No data available.	**Particulate Type**	Not relevant
Particulate Size	Not relevant	**Aerosol Type**	Not relevant
Odor Threshold	Not relevant	**Physical and Chemical Properties**	Not relevant
General Properties			
Boiling Point	Not relevant	**Melting Point**	Not relevant
Decomposition Temperature	Not relevant	**Heat of Decomposition**	Not relevant
pH	Not relevant	**Specific Gravity/Relative Density**	Not relevant
Density	Not relevant	**Bulk Density**	Not relevant
Water Solubility	Not relevant	**Solvent Solubility**	Not relevant
Viscosity	Not relevant		
Volatility			
Vapor Pressure	Not relevant	**Vapor Density**	Not relevant
Evaporation Rate	Not relevant	**VOC (Wt.)**	Not relevant
VOC (Vol.)	Not relevant	**Volatiles (Wt.)**	Not relevant
Volatiles (Vol.)	Not relevant		
Flammability			
Flash Point	Not relevant	**UEL**	Not relevant
LEL	Not relevant	**Auto-Ignition**	390 to 500 F(199 to 260 C)
Self-Accelerating Decomposition Temperature (SADT)	Not relevant	**Heat of Combustion (ΔHc)**	Not relevant
Burning Time	Not relevant	**Flame Duration**	Not relevant
Flame Height	Not relevant	**Flame Extension**	Not relevant
Ignition Distance	Not relevant		
Environmental			
Half-Life	Not relevant	**Octanol/Water Partition coefficient**	Not relevant
Coefficient of water/oil distribution	Not relevant	**Bioaccumulation Factor**	Not relevant
Bioconcentration Factor	Not relevant	**Biochemical Oxygen Demand BOD/BOD5**	Not relevant
Chemical Oxygen Demand	Not relevant	**Persistence**	Not relevant
Degradation	Not relevant		

Section 10 – Stability and Reactivity

Stability	- Stable when kept dry under normal temperatures and pressures.
Hazardous Polymerization	- Hazardous polymerization will not occur.
Conditions to Avoid	- High humidity and/or wet conditions.
Incompatible Materials	- None known.
Hazardous Decomposition Products	- None known.

Section 11 – Toxicological Information

Potential Health Effects

Inhalation

Acute (immediate) – May cause irritation

Chronic (delayed) – According to ACGIH, repeated and prolonged exposure to flour may cause lung effects referred to as “Baker’s Lungs” or allergic sensitization resulting in what is referred to as “Baker’s Asthma”.

Skin

Acute (immediate) – Under normal conditions of use, no health effects are expected.

Chronic (delayed) – Under normal conditions of use, no health effects are expected.

Eye

Acute (immediate) – May cause irritation

Chronic (delayed) – Under normal conditions of use, no chronic effects are expected.

Ingestion

Acute (immediate) – No effects are expected for most people. Listed as food allergen.

Chronic (delayed) – Under normal conditions of use, no chronic effects are expected.

Section 12 – Ecological Information

Ecological Fate	- No data available
Persistence/Degradability	- No data available
Bioaccumulation Potential	- No data available
Mobility in Soil	- No data available
Other Information	- Product has not been studied as distributed

Section 13 – Disposal Considerations

Product	- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 – Transportation Information

DOT	- Not regulated as a hazardous material.
IATA	- Not regulated as a dangerous good.

Section 15 – Regulatory Information

Not any known regulatory list for hazardous materials.

Section 16 – Other Information

Preparation Date - 6/9/2022
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