



Safety Data Sheet

Revision Date: 20-Jan-2022

Revision Number: 4

1. Identification

Product Name:

Wheat Flour

Synonyms:

AAFCO: 93.2 Wheat Flour IFN: 4-05-199

Wheat Flour less than 1.5% fiber

Product Code:

MILLING-WF

Use of the Substance / Preparation:

Animal Feed. Industrial use.

Supplier:

ADM Milling Co.

8000 W. 110th Street

Overland Park, KS 66210

Phone Number: 913-491-9400, 1-800-422-1688

Canadian Initial Supplier:

ADM Milling Co Canada

Danbro Crescent, Ontario, Canada

L5N 6P9

905-819-7000

1-800-267-8492

Emergency response telephone number:

Chemtrec 1-800-424-9300 (CCN 1635)

2. Hazard(s) identification

Emergency Overview

Warning. Fine dust dispersed in air may ignite. Product dust may cause mild, mechanical irritation.

Appearance

Light cream to White

Physical State

Powder

Odor

Cereal

This product IS classified as hazardous according to 29 CFR 1910.1200 (known as HCS 2012), amended to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Depending on the intended use, this product is classified as hazardous according to the criteria contained in the Hazardous Products Regulations (SOR/2015-17), also known as WHMIS 2015.

NOTE: Certain products covered under other Canadian legislation, including but not limited to cosmetics, devices, drugs or food (as defined in the Food and Drugs Act), pest control products (as defined in the Pest Control Products Act), consumer products (as defined in the Canada Consumer Product Safety Act), and Hazardous waste (being a hazardous product that is sold for recycling or recovery and is intended for disposal), are NOT subject to the label and SDS requirements of the Hazardous Products Regulations (SOR/2015-17), also known as WHMIS 2015. As supplied for use in food, an SDS and WHMIS compliant labeling are NOT required for this product. Since Canadian employers must still provide education and training on health effects, safe use, and storage, and in the interest of providing relevant product information to our customers, this SDS is being provided on a voluntary basis.

OSHA Defined Hazard(s)	Combustible Dust
HPR Defined Hazard(s)	Combustible Dust

Signal Word:	Warning
GHS Hazard Pictogram(s):	Note: The combustible dust hazard class does not have an assigned pictogram.
Hazard Statement(s):	May form combustible dust concentrations in air.

3. Composition/information on ingredients

Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Substance Hazard Class
Wheat flour	130498-22-5	80 - 100%	None known

4. First-aid measures

Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin Contact Rinse with water.

Inhalation Move to fresh air.

Ingestion Health injuries are not known or expected under normal use. If individual shows signs of sensitization, allergy, or other adverse affects, seek medical advice.

General Advice Contains wheat, and may trigger an allergic reaction.

Most important symptoms and affects, both acute and delayed

Eyes Contact with eyes may cause mechanical irritation.

Skin Product dust may cause mild, mechanical irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Inhalation Dust may cause irritation of respiratory tract. Susceptible persons may develop baker's asthma. Possible sensitisation for wheat allergen sufferers and asthmatics.

Ingestion May produce an allergic reaction.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. Fire-fighting measures

Flammable Properties

Powdered material may form explosive dust-air mixtures. Fine dust dispersed in air may ignite. Risk of ignition followed by flame propagation or secondary explosions should be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

Extinguishing media

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media None known.

Special hazards arising from the substance or mixture

Hazardous Combustion Products Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Acrolein.

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition.

Sensitivity to mechanical impact No information available.

Sensitivity to static discharge Yes. (as dust).

Advice for fire-fighters

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health 0
Flammability 1

Stability and Reactivity 0
Physical hazard None known



6. Accidental release measures

Personal Precautions, Protective Equipment, and Emergency Procedures

Avoid dust formation. Use personal protective equipment.

Environmental Precautions

No special environmental precautions required.

Methods and Materials for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal.

7. Handling and storage

Handling

Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Refer to NFPA 61, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities". Ensure adequate ventilation.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/Personal protection

Exposure Limits

Flour Dust: ACGIH TLV: [SEN] TWA: 0.5 mg/m³ inhalable fraction

Where exposure limits have not been established for specific components of this material, please observe the OSHA and ACGIH established limits for particulates not otherwise classified (PNOC). OSHA PEL: [15 mg/m³ (total dust) 8-hr TWA], [5 mg/m³ (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m³ (inhalable) 8-hr TWA], [3 mg/m³ (respirable) 8-hr TWA].

Chemical Name	ACGIH TLV	OSHA PEL	Mexico	NIOSH
Flour dust	[SEN] TWA: 0.5 mg/m ³ fraction inhalable			

Biological Limit Values

No biological limit values have been listed for the component(s) of this product.

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. However it is the duty of the user to verify this and follow given exposure limits at the workplace.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

If exposed to airborne dust, appropriate safety glasses with side-shields or safety goggles are recommended.

Skin and Body Protection

Special protective equipment is generally not required. Protective clothing and gloves may be worn to reduce the potential of mechanical irritation.

Respiratory Protection

If exposed to airborne dust, at or above the noted exposure limits, use appropriate NIOSH approved (or equivalent) respiratory protection.



9. Physical and chemical properties

Appearance

Light cream to White

Physical State

Powder

Odor

Cereal

Odor Threshold

Not applicable

pH

Not applicable

Flash Point

Not applicable

Autoignition Temperature

Not applicable

Boiling point	Not applicable
Melting/Freezing Point	Not applicable
Decomposition temperature	No information available
Oxidizing Properties	Not applicable
Flammability Limits in Air	Not applicable
Explosion Limits	Lower: 0.05 oz./cu.ft.
Molecular Weight	Not applicable
Water Solubility	Dispersible
Evaporation Rate	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Specific Gravity / Relative Density	No information available
Bulk Density	32 - 40 lbs./cu.ft.
Partition Coefficient (n-octanol/water)	No information available

10. Stability and reactivity

Stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Avoid dust formation.

Incompatible Materials No materials to be especially mentioned.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrogen oxides (NO_x). Acrolein.

11. Toxicological information

Information on toxicological effects

Acute toxicity	Based on available data, no evidence of acute toxicity. (Long history of safe use in food).
Skin corrosion/irritation	Based on available data, not, or only slightly irritating.
Serious eye damage/eye irritation	Based on available data, no evidence of serious eye damage / irritation.
Respiratory or skin sensitisation	Based on available data, not expected to be a skin or respiratory sensitiser.
Germ cell mutagenicity	Not classified. (Long history of safe use in food).
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	Not classified. (Long history of safe use in food).
STOT - single exposure	No evidence of toxicity.
STOT - repeated exposure	No evidence of toxicity.
Aspiration hazard	Based on available data, no known aspiration hazard.

Potential health effects

Eyes	Contact with eyes may cause mechanical irritation.
Skin	Product dust may cause mild, mechanical irritation. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Inhalation	Dust may cause irritation of respiratory tract. Susceptible persons may develop baker's asthma. Possible sensitisation for wheat allergen sufferers and asthmatics.
Ingestion	May produce an allergic reaction.

12. Ecological information

Ecotoxicity

Contains no substances known to be hazardous to the environment. Contains no substances known to be not degradable in waste water treatment plants.

Persistence/Degradability	Readily biodegradable
Mobility	Dispersible in water.
PBT and vPvB assessment	No information available.
Other adverse effects	Nothing specific known.

13. Disposal considerations

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods	Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.
Contaminated Packaging	Empty containers should be decontaminated and taken for local recycling, recovery or waste disposal.

14. Transport information

Domestic transport regulations (USA)

DOT Not regulated

Domestic transport regulations (Canada)

TDG Not regulated

Domestic transport regulations (Mexico)

MEX Not regulated

International transport regulations

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory information

International Inventories

As animal feed, this product is exempted from the following inventories: U.S.A. (TSCA). When used as "feed" defined in the Canadian Feeds Act 1995 and the Feeds Regulations (SOR/83-592), this product is exempted from the following inventory: Canada (DSL).

Chemical Name	TSCA	DSL	NDSL	ICL	EINECS	ELINCS	AICS
Wheat flour	No	Yes	No	Yes	Yes 603-421-3	No	No

The CAS registry number(s) indicated herein may not be suitable for determining compliance with DSL listing requirements

Chemical Name	ENCS ISHL	CHINA	PICCS	KECL	Taiwan	Turkey	NZIoC
Wheat flour	No	Yes	No	No	Yes	No	Yes

USA

Federal Regulations

Ozone Depleting Substances:

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 372.

CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

SARA 311/312 Hazardous Categorization

Refer to the OSHA hazard classification(s) provided in section 2 of this SDS.

State Regulations**State Right-to-Know**

No known components subject to "Right-To-Know" legislation in the following States. Massachusetts. Minnesota. New Jersey. Pennsylvania.

Canada**(NPRI) Canadian National Pollutant Release Inventory**

No known component is listed on NPRI.

16. Other information

Prepared By:	ADM - Product Regulatory Affairs
Revision Date:	20-Jan-2022
Revision Number:	4
Reason for revision:	Periodic review. This version replaces all previous versions.

Abbreviations and acronyms

A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values
CAS - Chemical Abstract Service
Ceiling - Ceiling Limit Value: Concentrations that should never be exceeded at any given time (instantaneous)
Delisted - Substances Delisted from Report on Carcinogens
DNEL - Derived No Effect Level
DOT - U.S. Department of Transportation
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
IARC - International Agency for Research on Cancer
IDLH - Immediately Dangerous to Life or Health
Known - Known Carcinogen

LC50 - Lethal concentration that produces fatalities in 50% of a given test population

LD50 - Median lethal dose of a given test population

NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOAEL - No Observed Adverse Effect Level

NTP - National Toxicology Program

OECD - Organisation for Economic Co-operation and Development

OSHA - Occupational Safety & Health Administration

OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits

PNEC - Predicted No-Effect Concentration

Present - Carcinogen or potential carcinogen to be identified under OSHA's Hazard Communication Standard

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

Skin notation - Potential for cutaneous absorption

STEL - Short Term Exposure Limit: Concentrations that should not be exceeded except for short periods of time (usually 15-minutes)

STOT - Specific Target Organ Toxicity

STV - Short Term Value (same as STEL)

TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)

TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)

Under Consideration - Under Consideration by the National Toxicology Program

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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