

Safety Data Sheet

***** Section 1 - Product and Company Identification *****

Material Name: Dry Milled corn products – grits, meals, flours, brans, whole grain. Includes non-gmo, organic and transitional versions.

Synonyms/Other Common Names: Corn Grits, Flaking Grits, Brewers Grits, Cornmeal, Corn Flour, Corn Germ, Hominy Feed, Pregelatinized Corn Product, Pregelatinized Corn Flour, Ceratex, Arepa, Snack Meal, Whole Grain Cornmeal, Whole Grain Corn Flour, ARP25, BCF320, BCM260E, BPSY400, CC401, CC401E, CC402, CC402E, CC403, CC404, CCF600, CCF600E, CCF602, CCF604, CCF604E, CCF607, CCF609, CCF610, CCF610E, CCF610P, CCF611, CCF611E, CCF615, CCF620, CCF650, CCF675, CCG012, CCG040, CCG040-R, CCG040E, CCG045, CCG050, CCG060, CCG070, CCG080, CCM250, CCM250E, CCM254, CCM254E, CCM255, CCM255E, CCM260, CCM260E, CGM100, CJRG070, CRF100, FCG165, FCG165E, FCG201, FCG202, FCM350, FCM350GBF, FCM350E, FCM355, FCM355E, MCF720, MCF750, MCF780, MCF800, MCG100, MCG115, MCG120, MCG122, WCC401, WCCF609, WCCF611, WCCF611E, WCCG040, WCCG040E, WCCM250, WCCM254, WCCM254E, WFCG155E, WFCG165, WFCG165E, WFCM350, WMCG100, WMCG105, WMCG120, MF04060, NC02080, ND06065, NF10085, NGFM020, NM02065, NM04085, NU20065, NU20085, RM04085, WNC02080, PGF1000, PCF1000, Allbond, USG15, USG95, PCF700, PCPF400, PCM254, PCM254E, PCF700, YPCF900, FEF040, FF025, FM020, FR020, PCF600, PCM254, WFF025, WFR020, WPCF600, WPCM254, WPCM254E, WPM350, PCM254E, FC080, ARP 254, ARP254E, WARP254, WARP254E, OCC401, OCCF604, OCCG040, OCCG050, OCCG012, OCCM250, OFCG165, OFCG202, OYCM200, OCCF600, OCCM254, OYCM205, OYCM315, OADOMHF, OMF04060, YCM205, YCM260, YCM300, YCM315, YPCF800, YPCF900, Toasted Corn Germ, NGCC401, NGCC402, NGCCF600, NGCCF607, NGCCF609, NGCCF610P, NGCCG012, NGCCG040, NGCCM254, NGCCM260, NGFCG165, NGFCM350, NGYCM315, NGYCM300, TFCM355, TMF04060, TYCM315, TGRM100, PPM200, PPM355, PPG120, PPG150, NGMF04060, TDCG250

Recommended Use & Restrictions: Products listed are sold as food ingredient or feed materials.

Manufacturer Information:

Bunge North America
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

Phone: 800-528-4633 between 8:00 AM – 5:00 PM Central Time
Fax: 314-292-2333

Emergency Information:

In the event of an Emergency, contact Chemtrec at 1-800-262-8200

***** Section 2 – Hazard(s) Identification *****

Hazard classification: Combustible dust / Respiratory hazard if small particles are generated during further processing, handling or other means.

Hazard Statement(s): Mildly irritating to the eyes (Class 2B eye irritant). May cause breathing difficulties if inhaled. If small particles are generated during further processing, handling, or other means, may form combustible dust concentrations in air.

Potential Health Effects:

Eyes – Dust may be a mechanical eye irritant.

Skin - Sensitive individuals may experience irritation.

Inhalation – Excessive inhalation may affect nose, throat or lungs. Avoid breathing dust.

Ingestion - None anticipated under anticipated use conditions. Sensitive individuals may experience an allergenic response.

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Carcinogenicity and Reproductive Hazard: Based on available data no evidence of carcinogenicity or reproductive toxicity.

Medical Conditions aggravated by exposure to product: No data available

Physical Hazards: None expected under normal conditions

Other Hazards (not otherwise classified): Milled grain products are not generally considered hazardous, but dust generated through downstream activities

Label Elements: Food product subject to FDA/USDA labeling and exempt from GHS labeling

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component (Chemical Name & Common Name)	Concentration
Not available	Milled corn products	Up to 100%
	Milled corn product dust	0-5%

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*** Section 4 - First Aid Measures ***

First Aid: Eyes If necessary, rinse eyes with water for 15 minutes. Remove contact lenses if applicable. Seek medical attention as needed.

First Aid: Skin - Wash with soap and water

First Aid: Ingestion - None

First Aid: Inhalation - Remove to fresh air. Seek medical attention for any breathing difficulty

Most important symptoms/effects (acute & delayed):

Eyes – Dust from particulates may be mildly irritating to the eyes

Skin – May cause irritation in sensitive individuals

Inhalation – Excessive inhalation may affect nose, throat and lungs. Allergies and respiratory ailments may be aggravated by exposure.

Ingestion: None expected under anticipated use conditions. May cause irritation to sensitive individuals.

*** Section 5 - Fire Fighting Measures ***

Extinguishing Media (suitable & unsuitable)

Foam, CO₂, water fog or dry chemical. Do not use a direct stream if dust is formed. Dust dispersed by direct stream in the presence of an ignition source could explode.

Hazardous Combustion Products

Oxides of carbon

Special Fire Fighting Equipment/Protective Equipment/Precautions

Product alone is not explosive. If fine grain dust is dispersed in air at sufficient concentration it may ignite if exposed to an ignition source. Firefighters should wear full protective gear.

*** Section 6 - Accidental Release Measures ***

Personal Precautions / Protective Equipment / Evacuation & Emergency Procedure: Methods and Material for Containment and Clean-up: Clean up with a soft bristle broom(s) or vacuum approved for a Class II hazardous location. Dust deposits should be maintained to a minimum on surfaces as these could form explosive mixture if they are dispersed in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dust surfaces with compressed air in the presence of an ignition source should not be allowed). Dispose of in accordance with local, State and Federal regulations.

*** Section 7 - Handling and Storage ***

Safe Handling Procedures & Safe Storage Procedures (including incompatibilities): Fine dust dispersed in air at a sufficient concentration may ignite if exposed to an ignition source. Remove grain dust from area / processing equipment prior to using any heat producing equipment such as arc welders, torches and spark / heat producing tools, such as surface grinders. According to 29 CFR 1910.272(f) a hot work permit is required.

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***** Section 8 - Exposure Controls / Personal Protection *****

Exposure Limits

Chemical	ACGIH (TWA & Ceiling)	OSHA (PEL)	Other
Corn Milled Product Dust	10 mg / M ³	15 mg / M ³ (Total) 5 mg / M ³ (Respirable)	

Engineering Controls

Ventilation: Local exhaust if needed.

Mechanical (General): If needed, ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent escape of dust into the work area. Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protective Equipment:

Eyes/Face – Safety glasses / goggles suggested if eye contact is possible

Skin/Hands – Typically not necessary. Gloves may be worn if needed.

Respiratory – Wear an approved NIOSH dust respirator whenever dust concentrations in the work area are above ACGIH TLV / OSHA PEL

Work / Hygienic Practices: Good personal hygiene practices should be followed. Avoid excessive dust accumulations and control ignition sources. Where appropriate, employ grounding, venting and explosion relief in accordance with accepted practices in processes capable of generating dust and/or static electricity.

***** Section 9 - Physical & Chemical Properties *****

Appearance: Products will be yellow or white granular materials – Dust will be fine particulates.

Odor: Typical of milled corn

Odor Threshold: ND

pH: ND

Melting Point/Freezing Point: NA

Initial Boiling Point and Boiling Range: NA

Flash point: NA

Evaporation Rate: NA

Flammability (solid/gas): ND

Upper/Lower Flammability/Explosive Limits (UFL/LFL): See below

Vapor Pressure: NA

Vapor Density: NA

Relative Density: NA

Solubility(ies): Approx. 1%

Partition Coefficient (n-octanol/water): ND

Auto-ignition temperature: ND

Decomposition temperature: ND

Viscosity: NA

Upper/Lower flammability or explosive limits: When dispersed into the air in sufficient concentrations, grain dust can explode in the presence of an ignition source. Do not allow dust to become dispersed in the air even by the extinguishing agent. Minimum explosive concentration (MEC) is generally > 50g / m³. However, moisture content, particle size, caloric properties and specific ingredients also affect the explosiveness of grain dust. For an explosion to occur four conditions must exist:

First – Oxygen (air) must be present

Second – There must be an ignition source (e.g., open flame, electrical short, sparks, etc.)

Third – There must be fuel (e.g., grain dust in suspension)

Fourth – There must be containment of suspended grain dust (e.g., in a silo, filtration system)

Although an explosion will not occur if there is no containment, the dust can still ignite resulting in a fire.

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*** Section 10 - Chemical Stability & Reactivity Information ***

Reactivity: Stable under normal conditions

Chemical Stability: Stable

Possibility of Hazardous Reactions: None anticipated

Conditions to Avoid (e.g., static discharge, shock, or vibration): Dispersing dust in air above MEC and exposure to ignition sources.

Incompatible materials: No materials to be especially mentioned.

Hazardous Decomposition products: CO₂, H₂S and Oxygen deficient atmosphere under improper storage conditions

*** Section 11 - Toxicological Information ***

Likely routes of exposure (inhalation, ingestion, skin and eye contact) & description of symptoms:

Eyes: May be a mechanical irritant

Skin: May be a mechanical irritant

Inhalation: Acute excessive inhalation of grain dusts may affect the nose, throat and lungs. Repeated and prolonged exposure to grain dusts may affect the respiratory system or cause sensitization. Smokers are at increased risk of respiratory effects. Allergies and respiratory ailments may be aggravated by exposure.

Ingestion: None anticipated under normal use conditions. May cause irritation to sensitive individuals
Airborne dust may be generated during handling which may be irritating to eyes and respiratory system.

Description of immediate, delayed or chronic effects from short or long-term exposure: None determined
Acute toxicity: Based on available data, no evidence of acute toxicity.

Numerical measures of toxicity (LD 50/LC50): No LD50/LC50 data are available for these products

Listed in NTP report on Carcinogens, or identified as potential carcinogen by IARC or OSHA: No

*** Section 12 - Ecological Information *** (non-mandatory)

A: General Product Information: No information available for these products

B: Component Analysis - Ecotoxicity - Aquatic Toxicity: No data available

*** Section 13 - Disposal Considerations *** (non-mandatory)

US EPA Waste Number & Descriptions

Disposal Instructions

All wastes must be handled in accordance with local, state and federal regulations.

See Section 7 for Handling Precautions. See Section 8 for Personal Protective Equipment recommendations

May be composted

*** Section 14 - Transportation Information *** (non-mandatory)

UN Number:

UN proper shipping name:

Transport hazard classes:

Packing group number:

Environmental hazards (e.g., marine pollutant)

Bulk transport guidance:

Other special precautions:

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*** Section 15 - Regulatory Information *** (non-mandatory)

US Federal Regulations (EPA, DOT, OSHA, CPSC)

All electrical equipment must be suitable for use in hazardous atmospheres involving combustible dust in accordance with 29 CFR 1910.307. The National Electrical Code, NFPA 70, contains guidelines for determining the type and design of equipment and installation which will meet this requirement.

Combustible Dust is a "Hazard, other than Chemical" as defined by the OSHA hazard communication standard 29 CFR 1910.1200

State/Provincial Regulations: None of these products components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.

Additional Regulatory Information

*** Section 16 - Other Information ***

Other Information

This Safety Data Sheet covers milled grain products in their normal state and does not include any chemicals that may be applied by subsequent handlers and/or distributors of the products.

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Key/Legend

NA - Not Applicable
ND - Not Determined
ACGIH - American Conference of Governmental Industrial Hygienists
OSHA - Occupational Safety and Health Administration
TLV - Threshold Limit Value
PEL - Permissible Exposure Limit
TWA - Time Weighted Average
STEL - Short Term Exposure Limit
NTP - National Toxicology Program
IARC - International Agency for Research on Cancer
MEC - Minimum Explosive Concentration

Revision Date: 5/29/2015, 1.0000 – initial version

Revision Date: 7/22/2015, 1.0001 – added USG15

Revision Date: 8/3/2015, 1.0002 – added OCCM254

Revision Date: 9/14/2015, 1.0003 – added Toasted Corn Germ

Revision Date: 2/7/2016, 1.0004 – added 13 Non-GMO products

Revision Date: 5/2/2016, 1.0005 – added NGYCM300

Revision Date: 8/25/2017, 1.0006 – added transitional and OMF04060. Expanded description.

Revision Date: 10/23/2018, 1.0007 - added CRF100

Revision Date: 2/21/2019, 1.0008 - added NGFM020

Revision Date: 5/30/2019, 1.0009 - added BPSY400

Revision Date: 7/27/2020, 1.0010 - added popcorn products

Revision Date: 8/17/2020, 1.0011 - added NGMF04060 non-gmo dietfiber corn bran, medium

Revision Date: 12/14/2020, 1.0012 - added TDCG250 Corn Germ-Dark Toasted