

Safety Data Sheet

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

Material Name: Soybean Meal

Synonyms/Other Common Names: Soybean Meal, Hi-Pro Soybean Meal, Bean Meal

Recommended Use & Restrictions: Normally used as animal feed

Manufacturer Information:

Bunge North America
1391 Timberlake Manor Parkway
Chesterfield, MO 63017

Phone: 314-292-2000 between 7:30 AM – 5:30 PM Central Time
Fax: 314-292-2384

Emergency Information:

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

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

Hazard classification: Organic Dust

Combustible Dust/Respiratory Hazard if small particles are generated during further processing, handling or by 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 by other means, may form combustible dust concentrations in air.

Potential Health Effects:

Eyes: Dust from particulates may be a mechanical eye irritant.

Skin: May cause irritation in sensitive individuals.

Inhalation: Excessive inhalation may affect nose, throat and lungs. Avoid breathing dust.

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

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 anticipated use conditions

Other Hazards (not otherwise classified):

Soybean meal is generally not considered hazardous, but dust generated through downstream activities that may reduce its particle size (e.g., shipping, handling, transfer to bins, etc.) may create a hazardous condition.

Avoid ignition sources.

If exposed to an ignition source, combustible organic dust may burn. Airborne dust in sufficient concentrations when exposed to an ignition source may flash or, in a confined situation, may fuel an explosion.

Label Elements:

Not Applicable due to FDA/USDA label exemption.

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

CAS #	Component (Chemical Name & Common Name)	Concentration
Not Available	Soybean Meal	Up to 100%
Not Available	Dust from Soybean Meal	0-5%

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

First Aid: Eyes: Flush eyes with water. Seek Medical attention as needed

First Aid: Skin: Wash with soap and water.

Safety Data Sheet

First Aid: Ingestion: If swallowed, give several glasses of water to dilute. Never give anything by mouth to an unconscious person.

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 in sensitive individuals.

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

Extinguishing Media (suitable & unsuitable): Extinguish with water fog, dry chemical powders or foam. Do not use strong streams of water or dry chemical if dust can be dispersed into the air. Dust placed in suspension with an ignition source present may flash or explode.

Hazardous Combustion Products: Oxides of Carbon

Special Fire Fighting Equipment/Protective Equipment/Precautions: If fine organic dust is dispersed in air at a 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 Procedures: & Methods and Material for Containment & Clean-Up:

Clean up with soft bristle broom(s) or a vacuum approved for a class II Hazardous location. Dust deposits should be maintained to a minimum on surfaces, as these could form an 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 meal dust from area/processing equipment prior to using any heat producing equipment such as arc welders, cutting torches and spark/heat producing tools, such as portable surface grinders.

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

Chemical	ACGIH (TLV)	OSHA (PEL)	Other
Soybean Meal Dust (Nuisance Dusts)	10 MG/M3	15 MG/M3 (Total) ; 5 MG/M3 (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 the escape of dust into the work areas. Use only appropriately classified electrical equipment and powered industrial trucks.

Personal Protective Equipment: Eyes/Face: Wear safety glasses/goggle suggested if eye contact is possible.

Personal Protective Equipment: Skin/Hand: N/A

Personal Protective Equipment: Respiratory: Wear an approved NIOSH dust respirator whenever dust concentrations in the work area are above ACGIH TLV/OSHA PELS.

Work/Hygienic Practices: Good personal hygiene practices should be followed. Avoid excessive dust accumulation and control ignition sources.

Where appropriate, employ grounding, venting and explosion relief in accordance with accepted engineering practices in processes capable of generating dust and/or static electricity. Avoid accumulation of dust on surfaces to prevent secondary dust explosions. Refer to appropriate OSHA, NFPA and applicable standards.

Safety Data Sheet

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

Appearance:	Yellow Granular
Odor:	Bean odor
Odor Threshold:	NA
pH:	NA
Melting Point/Freezing Point:	NA
Initial Boiling Point and Boiling Range:	NA
Flash point:	NA
Evaporation Rate:	NA
Flammability (solid/gas):	NA
Upper/Lower Flammability/Explosive Limits	See below
(UFL/LFL):	NA
Vapor Pressure:	NA
Vapor Density:	No information available
Relative Density:	Insoluble
Solubility(ies):	
Partition Coefficient (n-octanol/water):	No information available
Auto-ignition temperature:	NA
Decomposition temperature:	No Information available
Viscosity:	No information available

Upper/Lower Flammability or Explosive Limits: When dispersed into the air in sufficient concentrations organic dust can explode in the presence of an ignition source. Do not allow dust to become disbursed into the air even by the extinguishing agent. Minimum explosive concentrations is generally >50 g/m3 for organic dusts. However moisture content, particle size, caloric properties and specific ingredients also affect the explosiveness. For an explosion to occur, four conditions must exist. First, Oxygen (or 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, etc.). Although an explosion will not occur if there is no containment, the dust can still ignite resulting in a fire.

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

Reactivity: Stable under normal conditions

Chemical Stability: Stable under normal conditions

Possibility of Hazardous Reactions: None under normal conditions

Conditions to Avoid (e.g., static discharge, shock, or vibration): Dispensing dust in air, above MEC, and exposure to potential 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 mechanical irritant.

Skin: May be 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 have an increased risk of respiratory effects.

Allergies and respiratory ailments may be aggravated by exposure.

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

Description of immediate, delayed or chronic effects from short or long-term exposure:

Acute toxicity: Based on available data, no evidence of acute toxicity

Numerical measures of toxicity (LD 50/LC50): No LD50/LC50's are available for this product's components.

Listed in NTP report on Carcinogens, or identified as potential carcinogen by IARC or OSHA:

None of this product's components are listed as such by ACGIH, IARC, OSHA, NIOSH, or NTP.

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

Ecotoxicity

A: General Product Information: No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity: No ecotoxicity data are available for this product's components.

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

US EPA Waste Number & Descriptions:

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions:

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

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

Safety Data Sheet

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

UN proper shipping name: US Dot Information: Shipping Name-Not Regulated

Transport hazard classes:

Other special precautions:

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

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

Section (B)(5)(III) of the HCS (29 CFR 1910.1200) exempts food, including feed and therefore any associated feed dust from the labeling requirements of the HCS since the food/feed is subject to the labeling requirements of the Food and Drug Administration.

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 this product's 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 the material as produced and does not include additives, chemicals or other materials that may be applied by subsequent handlers and/or distributors of this product.

Bunge believes, to the best of its knowledge, that the information contained herein is accurate as of the date hereof. However, as the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. **MOREOVER, NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREIN AS TO THE INFORMATION PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** The health and safety precautions contained herein may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely. Users should satisfy themselves that they have all current data relevant to their particular use and that their activities comply with all applicable laws.

Key/Legend

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