Safety Data Sheet

Original Preparation Date: 16-Nov-2010 **Revision Date:** *24-May-2017* **Revision Number:** *1*

1. Identification

Product Name:
SOYBEAN MEAL

Product Code:
991110

Synonyms:
AAFCO: Soybean Meal, Solvent Extracted; IFN:5-04-604

Use of the Substance / Preparation:
Animal feed ingredient / Industrial use

Contact Manufacturer:
Archer Daniels Midland Company
4666 Faries Parkway
Decatur, IL 62526, USA
Telephone Number: (+1) 217-424-5200

Emergency response telephone number:
Chemtrec 1-800-424-9300 (CCN 1635)

2. Hazard(s) identification

Emergency Overview

Warning. May form combustible dust concentrations in air (during processing and handling). Product dust may cause mild, mechanical irritation. Contains Soy. May produce an allergic reaction.

Appearance	Physical State	Odor
Light brown - Tan	Solid / Meal	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). This product is NOT classified as hazardous according to the criteria contained in the Hazardous Products Regulations (SOR/2015-17), also known as WHMIS 2015.

OSHA Defined Hazard(s)	Combustible Dust

Signal Word:	Warning
Hazard Statement(s):	May form combustible dust concentrations in air (during processing and handling)

3. Composition/information on ingredients

Description Soybean meal (Meal resulting from solvent extraction of oil from soybeans)

Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Substance Hazard Class
Soybean meal	68308-36-1	99-100	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 Wash off with warm water and soap.
Inhalation Move to fresh air.
Ingestion Clean mouth with water and afterwards drink plenty of water. Immediate medical attention is not required.
General Advice Contains Soy. May produce an allergic reaction.

Most important symptoms and affects, both acute and delayed

Eyes Dust may cause mechanical irritation to eyes resulting in redness or watering.
Skin Product dust may cause mild, mechanical irritation.
Inhalation Dust may cause irritation of respiratory tract. See section 8 of this sheet for exposure limits pertaining to nuisance dust or "particulates not otherwise regulated".
Ingestion Health injuries are not known or expected under normal use.
Main Symptoms Repeated or prolonged exposure may cause irritation of eyes and skin. Inhalation of dust may cause breathing difficulties.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Special forms of treatment and immediate medical attention are not specified. Treat Symptomatically.

5. Fire-fighting measures

Flammable Properties

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. As with most organic solids, combustion is possible at elevated temperatures or by contact with an ignition source.

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray. Carbon dioxide (CO_2). Sand. Dry chemical.
Unsuitable Extinguishing Media None known.

Special hazards arising from the substance or mixture

Hazardous Combustion Products	Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO_2), Nitrogen oxides (NOx), Acrolein.
Specific Hazards Arising from the Chemical	None known.
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
Use personal protective equipment. Avoid dust formation.
Environmental Precautions
Prevent further leakage or spillage if safe to do so.
Methods and Materials for Containment and Cleaning Up
Sweep up and shovel into suitable containers for disposal. For disposal information see section 13.

7. Handling and storage

Handling
Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Refer to 29CFR 1910.272 Grain Handling Standard. Refer to NFPA 61, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities".
Storage
Keep containers dry and tightly closed to avoid moisture absorption and contamination.

8. Exposure controls/Personal protection

Exposure Limits
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/m^3 (total dust) 8-hr TWA], [5 mg/m^3 (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m^3 (inhalable) 8-hr TWA], [3 mg/m^3 (respirable) 8-hr TWA].

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. If airborne dust concentrations are excessive, wear goggles.
Skin and Body Protection	Protective clothing and gloves may be worn to reduce the potential of mechanical irritation.
Respiratory Protection	If exposed to airborne dust, use appropriate NIOSH approved (or equivalent) respiratory protection.

9. Physical and chemical properties

Appearance	Light brown - Tan
Physical State	Solid / Meal
Odor	Cereal
Odor Threshold	No information available
pH	No information available
Flash Point	Not applicable
Autoignition Temperature	No information available
Boiling point	Not applicable
Melting/Freezing Point	Not applicable
Decomposition temperature	No information available
Oxidizing Properties	No information available
Flammability Limits in Air	Not applicable

Water Solubility	Dispersible
Evaporation Rate	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity / Relative Density	No information available
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 conditions that generate dust. Heat, flames and sparks.
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 (CO_2). Nitrogen oxides (NOx). Acrolein.

11. Toxicological information

Information on toxicological effects

Acute toxicity	Based on available data, no evidence of acute toxicity.
Skin corrosion/irritation	Based on available data, not, or only slightly irritating.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

Potential health effects

Eyes	Dust may cause mechanical irritation to eyes resulting in redness or watering.
Skin	Product dust may cause mild, mechanical irritation.
Inhalation	Dust may cause irritation of respiratory tract. See section 8 of this sheet for exposure limits pertaining to nuisance dust or "particulates not otherwise regulated".
Ingestion	Health injuries are not known or expected under normal use.
Main Symptoms	Repeated or prolonged exposure may cause irritation of eyes and skin. Inhalation of dust may cause breathing difficulties.

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	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). The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	ICL	EINECS	ELINCS	AICS
Soybean meal	Yes	Yes	No	No	Yes 269-648-1	No	No

Chemical Name	ENCS ISHL	CHINA	PICCS	KECL	Taiwan	Turkey	NZIoC
Soybean meal	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.

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes (when in the form of combustible dust)

Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)
This product is not known to contain any HAPS.

State Regulations

California Proposition 65
This product is not known to contain chemicals listed under Proposition 65.

State Right-to-Know
No known components subject to "Right-To-Know" legislation.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Soybean meal	99-100	No	No	No	No

Canada

(NPRI) Canadian National Pollutant Release Inventory
No known component is listed on NPRI.

Mexico

Mexico - Grade Slight risk, Grade 1

16. Other information

Prepared By: ADM Oilseed Processing
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Revision Date: 24-May-2017
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Reason for revision: New SDS format. This version replaces all previous versions.

Abbreviations and acronyms
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
A4 - Not classifiable as a human 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)
CHINA - Chinese Inventory of Existing Chemical Substances (China)
CLP - Classification, Labelling and Packaging, Regulation (EC)1272/2008
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
Delisted - Substances Delisted from Report on Carcinogens
DNEL - Derived No Effect Level
DOT - U.S. Department of Transportation
DSL - Domestic Substance List (Canada)
EC - European Commission

EC No. - European Community number
EC50 - Half maximal effective concentration
EINECS - European Inventory of Existing Commercial Chemical Substances (EU)
ELINCS - European List of Notified Chemical Substances (EU)
ENCS - Existing and New Chemical Substances (Japan) / ISHL - Industrial Health and Safety Law (Japan)
EPCRA - Emergency Planning and Community Right-to-Know Act of 1986 (USA)
FOSFA - The Federation of Oils, Seeds and Fats Associations
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
Group 3 - Not Classifiable
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association Dangerous Goods Regulations
IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO - International Civil Aviation Organisation
ICL - In Commerce List (Canada)
IDLH - Immediately Dangerous to Life or Health
IMDG - International Maritime Dangerous Goods Code
IMO - International Maritime Organization
IUB - International Union of Biochemistry and Molecular Biology
KECL - Korean Existing and Evaluated Chemical Substances (Korea)
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
Marpol - International Convention for the Prevention of Pollution From Ships
MEPC - Marine Environment Protection Committee
MEX - NOM-002-SCT/2003 List of Hazardous Substances and Materials Most Commonly Transported
MEXICO - Mexico Occupational Exposure Limits
NDSL - Non Domestic Substances List (Canada)
NFPA - National Fire Protection Association
NIOSH - National Institute of Occupational Safety and Health
NOAEL - No Observed Adverse Effect Level
NTP - National Toxicology Program
NZIoC - New Zealand Inventory of Chemicals (New Zealand)
OECD - Organisation for Economic Co-operation and Development
OSHA - Occupational Safety & Health Administration
OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits
PICCS - Inventory of Chemicals and Chemical Substances (Philippines)
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
SEN - Sensitizer notation. May reflect risk of dermal and/or inhalation sensitization (consult ACGIH documentation).
Skin notation - Potential for cutaneous absorbtion
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)
TDG - Transportation of Dangerous Goods (Transport Canada)
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
vPvB - Very Persistent and Very Bioaccumulative
WHMIS - Workplace Hazardous Materials Information System

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.

End of sheet