

Safety Data Sheet

Feeds

Section 1. Identification

Product Identifier	Feeds		
Synonyms	Feed		
Manufacturer Stock Numbers	N/A		
Recommended use	Feed and other		
Uses advised against	N/A		
Manufacturer Contact			
Address	Zeeland Farm Services, Inc PO BOX 290 Zeeland, MI, 49464 USA		
	Phone	Emergency Phone	Fax
	(616) 772-9042	(800) 748-0595	N/A
	Email		
	maryc@zfsinc.com		

Section 2. Hazards Identification

Classification	EYE DAMAGE/IRRITATION - Category 2B OSHA defined hazards - Combustible Dust
Signal Word	Warning
Pictogram	
Hazard Statements	Causes eye irritation
Precautionary Statements	
Response	If eye irritation persists: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Prevention	Wash hands thoroughly after handling.
Storage	N/A
Disposal	N/A

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

Emergency Overview May be mechanical irritant to eyes. Excessive inhalation of grain dusts may affect nose throat, and lungs. May form combustible dust concentration in air; See "Explosion Hazard" below

Explosion Hazard Grain is generally considered not hazardous, but dust generated through downstream activities that may reduce its size (e.g., processing, shipping, handling, etc.) may create a hazardous condition.

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

Section 3. Ingredients

CAS	Ingredient Name	Weight %
	Dust from prepared animal feeds (grain, plant, protien, vitamin, mineral)	100 %

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

Inhalation Remove person from exposure. Seek Medical attention for any breathing difficulty.

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

Eye Contact Flush eyes with water. Seek medical attention as needed.

Skin Contact Wash affected skin with soap and water

Section 5. Fire Fighting Measures

Suitable Extinguishing Media 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 sources present may flash or explode

Unsuitable Extinguishing Media N/A

Unusual Fire and Explosion Hazards WHOLE GRAIN IS NOT EXPLOSIVE. Fine dust dispersed in air at a sufficient concentration may ignite if exposed to an ignition source

Special Fire Fighting Procedures: 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 sources present may flash or explode

Hazardous Combustion Products: Oxides of carbon

Section 6. Accidental Release Measures

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 released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., cleaning dust surfaces with compressed air in the presence of ignition source should not be allowed). Non-sparking tools should be used.

Section 7. Handling and Storage

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, cutting torches and spark/heat producing tools such as portable surface grinders. According to 29 CFR 1910.272(F) a hot work permit is required.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Dust from prepared animal feeds (grain, plant, protein, vitamin, mineral)	N/A	N/A	N/A
Personal Protective Equipment	Respirator			
Respiratory Protection:	May cause irritation of the nasal membranes or the upper respiratory tract. If dust exceeds the nuisance level. wear an approved NIOSH dust respirator whenever dust concentrations in the work area are above ACGIH TLV/OSHA PELs.			
Gloves	NA			
Eye Protection:	Safety Glasses/goggles suggested in dusty conditions			
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.			
Work/Hygienic Practices:	Good personal hygiene practices should be followed. Wash hands and face before eating, drinking, etc.			
Additional Information	Avoid dust accumulation and control ignition sources. where appropriate, employ grounding, venting, and explosion relief provisions 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.			
	Grain Dust (Wheat, Oak, and Barley) OSHA PEL 10mg/m ³			

Other Grains
OSHA 15mg/m3 (Total) OSHA 5mg/m3 ACGIH TLV 10mg/m3

This TLV applies to nuisance particulates. The grain industry believes there is currently inadequate data to support this TLV

Section 9. Physical and Chemical Properties

Physical State	solid
Color	tan to dark brown
Odor	may have sweet
Odor Threshold	N/A
Solubility	N/A
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	1
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	N/A
FP Method	N/A
Ph	N/A
Melting Point	N/A
Boiling Point	N/A
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	N/A
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	N/A
Vapor Density	N/A

Additional Information LEL is variable based on content. The UEL is unknown because content varies.

Section 10. Stability and Reactivity

Stability: Stable
Conditions to Avoid: Dispersing dust in air, above MEC, and exposure to potential ignition sources
Incompatibility (materials to avoid): None Known
Hazardous Decomposition or by Products: CO₂, H₂S and Oxygen deficient atmosphere under improper storage conditions.

Hazardous Polymerization: Will Not Occur

Section 11. Toxicological Information

Routes of Entry:	Inhalation: Yes Skin: Yes Eyes: Yes Ingestion: Unlikely
Acute:	May be mechanical irritant to skin and eyes. Excessive inhalation of feed dusts may affect the nose, throat, and lungs.
Chronic:	Repeated and prolonged inhalation of feed dusts may affect the respiratory system. Smokers have an increased risk of respiratory effects.
Signs and Symptoms of Exposure:	Irritation to the skin, eyes, nose or throat may occur. Some people may occasionally experience coughing.
Medical Conditions Generally Aggravated by Exposure:	Allergies and respiratory ailments.

Section 12. Ecological Information

Non-Mandatory

Section 13. Disposal

Non-Mandatory

Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	N/A
DOT Classification	N/A
Packing Group	N/A
Non-Mandatory	

Section 15. Regulatory Information

Non-Mandatory

Additional Information	Section (B)(5)(III) of the HCS (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.
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Section 16. Other Information

Revision Date

5/1/2015

Additional Information

Animal Feed is comprised of whole and processed grains and may contain added vitamins and minerals. Feed components generally produce a limited amount of dust in manufacturing and handling of the material.

This SDS is Generic and May Not Apply To All Feed Formulations. For example, feed with certain added medications premixes, vitamin and mineral supplements may contain ingredients that result in different or additional hazards, may require exposures and /or may require additional exposure controls and personal protection. The manufacturer is encouraged to evaluate each feed fomulation to determine if this generic sds is appropriate.

This generic SDS is not intended to suggest that a SDS is required for ALL feed dust in ALL circumstances. The manufacturer or importer should make its own interpretation of OSHA's HCS, including the exemptions in the standard, for its specific product. Some manufacturers or importers may also produce a SDS for feed dust even if such a SDS is not required by OSHA's HCS. This generic SDS may be useful for those manufacturers or importers.

In accordance with OSHA's HCS all materials: 1) which constitute 1% or more of this product and meet the standard's definition of hazardous materials, 2) That constitute 0.1% or more and meet the standard's definition of carcinogens, and or 3) That could be released from the product in excess of established limits should be listed and may require a specific SDS