Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name:	GRAIN
SDS Number:	Grain
Synonyms/Other Means of Identification:	
Intended Use:	Food/Feed
Manufacturer:	Consolidated Grain and Barge Co.
Emergency Health and Safety Number:	(618) 225-0039
SDS Information:	P.O. Box 249, Mandeville, LA., 70470-0249 (618)225-0039 URL: WWW.CGB.COM

SECTION 2: HAZARD(S) IDENTIFICATION

Classification: Combustible Dust/Respiratory Hazard If small particles are generated during further processing, handling or by other means.

Signal Word: Warning

Hazard Statement(s): 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.

Precautionary Statement(s): Dust from particulates may be a mechanical eye irritant. Rinse eyes with water for several minutes. Avoid breathing dust. Excessive inhalation may affect nose, throat and lungs. Avoid ignition sources: Grain dust may burn if suspended in air and may create a flash fire/ explosion hazard.

Emergency Overview: Dust from particulates 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 particle size (e.g., shipping, handling, transfer to bins, etc.) may create a hazardous condition. If exposed to an ignition source, dust may burn. Airborne dust in sufficient concentrations when exposed to an ignition source may flash or, in a confined situation, fuel an explosion.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CASRN	Concentration
Whole grains		Up to 100%
Foreign material (such as organic plant material)		0-5%
Grain Dust		0-5%

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.

Skin Contact: Wash affected skin with soap and water.

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

SECTION 5: FIRE-FIGHTING MEASURES

Hazardous Combustion Products: Oxides of carbon

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.

Unusual Fire and Explosion Hazards: Fine dust dispersed in air at a sufficient concentration may ignite or explode if exposed to an ignition source.

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).

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. 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. See applicable standards, such as NFPA 61, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities," for grain handling and storage guidance.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Other Grains

OSHA PEL	ACGIH TLV
15 mg/m3 (total) 5 mg/m3 (respirable)	10 mg/m3

GRAIN DUST (WHEAT, OAT AND BARLEY)

OSHA PEL	ACGIH TLV
10 MG/M3	4MG/M3

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, maintained and operated in a manner to avoid the escape of dust. Use only appropriately classified electrical equipment and powered industrial trucks.
Protective Gloves: N/A
Eye Protection: Safety glasses / goggles suggested in dusty or windy conditions
Work/Hygienic Practices: Good housekeeping and personal hygiene practices should be followed. Avoid excessive dust accumulation and control ignition sources. Refer to appropriate OSHA, NFPA and applicable standards.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Whole grain has natural grain color. Grain dust appears as a light, grayish or brown powder.

Odor: No distinct odor (out-of-condition products may be sour or musty). **Odor threshold:** N/A

pH: N/A

Melting point/freezing point: N/A **Initial boiling point and boiling range:** N/A

Flash point: N/A **Evaporation rate:** N/A

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 into the air, even by the extinguishing agent. Minimum explosive concentration is 55 *g/m3*. However, moisture content, particle size, caloric properties, and specific ingredients also affect the explosiveness of grain dust.

LEL: Unknown **UEL:** Unknown

Vapor pressure: N/A **Vapor density:** N/A

Solubility: N/A **Partition coefficient** n-octanol/water: N/A

Auto-ignition temperature: N/A **Decomposition temperature:** N/A

SECTION 10: STABILITY AND REACTIVITY

Reactivity: N/A

Chemical Stability: Stable

Possibility of Hazardous Reactions: N/A

Conditions to Avoid: Dispersing dust in air, above MEC, and exposure to potential ignition sources, static discharges.

Incompatibility (materials to avoid): None known

Hazardous Decomposition or Byproducts: CO2 H2S and oxygen deficient atmosphere under improper storage conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Exposure: **Inhalation:** X **Skin:** X **Eyes:** X **Ingestion:** Unlikely

Carcinogenicity: **NTP:** No **ARC Monographs:** No **OSHA Regulated:** No

Acute: May be mechanical irritant to skin and eyes. Excessive inhalation of grain dusts may affect the nose, throat, and lungs.

Chronic: Repeated and prolonged exposure to grain dusts may affect the respiratory system or cause sensitization. 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 CONSIDERATIONS: (non-mandatory)

SECTION 14: TRANSPORT INFORMATION: (non-mandatory)

SECTION 15: REGULATORY INFORMATION: (non-mandatory)

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.

SECTION 16: OTHER INFORMATION

Revision Date: May 29, 2015

This Safety Data Sheet covers grain in its natural state and does not include chemicals that may be applied by subsequent handlers and/or distributors of this product. The information in this SDS was obtained from sources that we believe are reliable; however, the information is provided without any representation or warranty whatsoever, expressed or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim any and all liability for loss, injury, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of this product.