



Health	1
Fire	1
Reactivity	0
Personal Protection	1

## Material Safety Data Sheet

### Dry Distillers Grain

#### Section 1: Chemical Product and Company Identification

<p><b>Product Name:</b> Dry Distillers Grain</p> <p><b>CAS#:</b> NA</p> <p><b>RTECS:</b></p> <p><b>TSCA:</b> Not listed</p> <p><b>CI#:</b> Not available.</p> <p><b>Synonym:</b> Dry Distillers Grain(s), DDG, DDGS Dried Distillers Grain(s) Distiller's Dry Grain with Solubles</p> <p><b>Chemical Name:</b> Dry Distillers Grain</p> <p><b>Chemical Formula:</b> NA</p>	<p><b>Contact Information:</b></p> <p><b>Homeland Energy Solutions. LLC</b> 2779 Iowa Hwy 24 Lawler, Iowa 52154</p> <p>563-238-5555</p> <p>Order online:</p> <p><b>CHEMTREC (24HR Emergency Telephone), call:</b> 1-800-424-9300</p> <p><b>International CHEMTREC, call 1-703-527-3887</b></p> <p><b>For non-emergency assistance, call 563-238-5555</b></p>
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#### Section 2: Composition and Information on Ingredients

Name	CAS #	% by Weight
Dry Distillers Grain	NA	100%

OSHA Hazardous Components (29CFR 1910.1200)  
 Toxicological Data on Ingredients: OSHA PEL – 10mg/M3      ACGIH TLV – 4mg/M3      NIOSH – 4mg/M3

#### Section 3: Hazards Identification

<p><b>Potential Acute Health Effects</b> Prolonged exposure to the dust may cause wheezing, chest tightness, productive cough, eye and nasal irritation, and symptoms of chronic respiratory disease. Dust may also induce asthmatic reactions via an allergic mechanism, particularly in individuals who are predisposed to developing allergies.</p>	
<p><b>Potential Chronic Health Effects:</b>          CARCINOGENIC EFFECTS: Not available.          TERATOGENIC EFFECTS: Not available.</p>	<p>MUTAGENIC EFFECTS: Not available.          DEVELOPMENTAL TOXICITY: Not available.</p>

### Section 3: Hazards Identification, Continued

**Eye Contact:** Dust may be irritating to the eyes. Avoid wearing contact lens if dust conditions are encountered.

**Skin Contact:** Dust has a slightly acid pH when mixed with water. Distillation byproducts in the dust may produce allergic skin reactions including redness, itching, etc. in sensitive individuals

**Inhalation:** Prolonged exposure to the dust may cause wheezing, chest tightness, productive cough, eye and nasal irritation, and symptoms of chronic respiratory disease. Dust may also induce asthmatic reactions via an allergic mechanism, particularly in individuals who are predisposed to developing allergies.

**Ingestion:** Material is non-toxic by ingestion.

**Chronic:** Asthma, bronchitis, chronic obstructive pulmonary disease, conjunctivitis, dermatitis, rhinitis, grain fever.

### Section 4: First Aid Measures

**Inhalation:** Allow the victim to rest in a well ventilated area. Seek immediate medical attention. In cases of inhalation of IDLH levels, evacuate the victim to a safe area as soon as possible. Loosen tight fitting clothing. If breathing is difficult, administer oxygen. If victim is not breathing, perform mouth to mouth resuscitation. Seek medical attention.

**Eye Contact:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lens. Do not use an eye ointment. Consult a physician if irritation persists after flushing eyes.

**Skin Contact:** If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

**Ingestion:** Not a hazard unless ingested in such quantities as to interfere with normal digestion.

### Section 5: Fire and Explosion Data

**Flammability of the Product:** Not applicable

**Auto-Ignition Temperature:** Unknown

**Flash Points:** NA

**Flammable Limits:** NA

**Products of Composition:** Carbon oxides including carbon monoxide and carbon dioxide.

**General Hazards:** Fugitive grain dust is combustible and present and explosion hazard. Avoid the use of compressed air to blow dust from ledges, walls and other areas when there are ignition sources in the area.

**Fire Fighting Instructions:** Powder, alcohol resistant foam, water in large amounts, carbon dioxide.

**Fire Fighting Equipment:** Respiratory and eye protection required for fire fighting personnel. Full protective equipment and a full face piece self-contained breathing apparatus in pressure demand mode should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

### Section 6: Accidental Release Measures

**Land Spill:** Eliminate ignition sources. Isolate hazard area and deny entry to unauthorized or unprotected personnel. Remove spilled material so as to avoid creating airborne dust. Spilled waste material is combustible but is not classified as a hazardous material.

**Water Spill:** Material is a natural material. Small spills will dilute naturally with the water and will biodegrade.

### Section 7: Handling and Storage

**Storage:** Storage Temperature – Ambient    Storage Pressure – Atmospheric

General: Keep container closed. Loosen closure cautiously before opening. Store in cool dry, well ventilated place away from incompatible materials such as oxidizing agents, acids or caustics.

Keep away from heat, flame or sparks

Protect material from direct sunlight and moisture intrusion.

### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of dust below their respective TLV. Ensure that eyewash station and safety shower is available.

**Personal Protection:** Wear filtered face pieces suitable for nuisance dusts. Do not wear contact lens when working with this material.

### Section 9: Physical and Chemical Properties

Physical State and Appearance: Solid

Vapor Pressure: NA

Odor: Characteristic. Fermentation odor

Appearance: Yellowish brown

pH (1% soln/water): 3 -4pH

Boiling Point: NA

Solubility: Insoluble

Vapor Density: (Air=1) at 78° C: Not applicable

### Section 10: Stability and Reactivity

**General:** This product is stable and hazardous polymerization will not occur.

**Incompatible Materials and Conditions to Avoid:** Incompatible materials such as oxidizing agents, acids or caustics.

**Hazardous Decomposition:** None

### Section 11: Toxicological Information

**Toxicity to Animals:** NA

**Chronic Effects on Humans:** Prolonged or repeated exposure to dust can result in asthma, bronchitis, chronic obstructive pulmonary disease, conjunctivitis, dermatitis, rhinitis and or grain fever.

### Section 12: Ecological Information

**Ecotoxicity:** NA  
**BOD5 and COD:** NA

**Products of Biodegradation:** Products of biodegradation are expected to be short chained alcohols, aldehydes, fatty acids and carbon dioxide.

### Section 13: Disposal Considerations

**Waste Disposal:** This material is not defined as hazardous under existing regulations.

### Section 14: Transport Information

**DOT Classification:** NA  
**Identification:** NA  
**Special Provisions for Transport:** NA

### Section 15: Other Regulatory Information

**Federal and State Regulations:**

**TSCA 8(b) Inventory:** Components of this product are not listed under the TSCA Inventory.

**SARA Title III:** Components of this product are not listed under this statute.

**CERCLA:** Components of this product are not listed under this statute.

## Section 16: Other Information

**References:** Legend Technical Services, Inc.

**Created:** 12/15/2004

**Last Updated:** 04/23/2009

**HMIS (U.S.A.):**

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection:1

**National Fire Protection Association (U.S.A.)**

Health: 1

Flammability: 1

Reactivity: 0

Specific hazard: NA

Complies with WHMIS Requirements in Canada.

OSHA Requirements in USA

Prepared by: Larry Pascal

This information relates to this specific material. It may not be valid for this material if it is used in combination with any other materials or in any process. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information of this information for his own particular use. All materials may present unknown hazards and should be used with caution although certain hazards are described herein, we cannot guarantee these are the only hazards that exist.