

**CHIPPEWA VALLEY ETHANOL COMPANY, LLLP**  
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**320.843.4813 (8am-5pm M-F)**  
**800.424.9300 (Chemtrec)**

**Section 1: PRODUCT IDENTIFICATION**

Product Name: **Dried Distillers Grains with Solubles**  
 Common Names: DDGS; Distiller's Grains; Distillers Dried Grains – Animal Feed

**Section 2: HAZARDS IDENTIFICATION**

Physical Hazards	Not classified
Health Hazards	Not classified
Environmental Hazards	Not classified
OSHA defined hazards	Combustible dust
Label elements	
Hazard Symbol	None
Signal Word	Warning
Hazard Statement	May form combustible dust concentrations in air.
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known
Supplemental information	Not applicable

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<b><u>INGREDIENT</u></b>	<b><u>CAS #</u></b>	<b><u>% (BY WT)</u></b>
Dried Distillers Grains with Solubles	N/A	90

Components not listed are either non-hazardous or below the required disclosure threshold

**Section 4: FIRST AID**

<b>Inhalation</b>	If symptomatic, move to fresh air. If respiratory problems, administer artificial respiration/oxygen. Get medical attention if symptoms persist.
<b>Skin contact</b>	Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing.
<b>Ingestion</b>	Seek medical attention if discomfort persists.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation. Dust may irritate respiratory system.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Contact physician if discomfort continues

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## Section 5: FIRE AND EXPLOSION INFORMATION

EXTINGUISHING MEDIA: Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

HAZARDOUS DECOMPOSITION PRODUCTS: NA

FIREFIGHTING PROCEDURES Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SPECIAL FIRE & EXPLOSION HAZARDS: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**NFPA CODES:**      **HEALTH - 0**      **FLAMMABILITY - 1**      **REACTIVITY - 0**

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## Section 6: ACCIDENTAL RELEASE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

**Small Spill:** Prevent runoff from entering drains, sewers, or streams. Nonsparking tools should be used. Absorb with vermiculite or other inert material and put the spilled material in a container for chemical waste.

**Large Spills:** Sweep up and place in a clearly labeled container for chemical waste. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Nonsparking tools should be used. Flush area with water. Dike for later disposal

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## Section 7: HANDLING AND STORAGE

**Handling:** Wear protective clothing as described in Section 8 of this safety data sheet. Minimize dust generation and accumulation. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage:** Keep container closed. Store away from incompatible materials (See Section 10). Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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## Section 8: EXPOSURE CONTROL, PERSONAL PROTECTIVE EQUIPMENT

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<u>Components</u>	<u>Type</u>	<u>Value</u>	<u>Form</u>
Dried Distillers Grains with Solubles (CAS -)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

<u>Components</u>	<u>Type</u>	<u>Value</u>	<u>Form</u>
Dried Distillers Grains with Solubles (CAS -)	TWA	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.
		50 millions of particle	Total dust.
		15 millions of particle	Respirable fraction.

#### US. ACGIH Threshold Limit Values

<u>Components</u>	<u>Type</u>	<u>Value</u>	<u>Form</u>
Dried Distillers Grains with Solubles (CAS -)	TWA	3 mg/m <sup>3</sup>	Respirable particles
		10 mg/m <sup>3</sup>	Inhalable particles

#### Biological limit values

No biological exposure limits noted for the ingredient(s).

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.

#### Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear protective gloves. Other Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister.

Thermal hazards  
**General hygiene considerations**

Wear appropriate thermal protective clothing, when necessary.  
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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## Section 9: PHYSICAL PROPERTIES

<b>Appearance</b>	Brown granular
Physical state	Solid.
Form	Granular.
Color	Brown.
<b>Odor</b>	Slightly toasted smell
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	Weighted solids ~90%

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## Section 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Not available.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat, sparks, flames, elevated temperatures. Minimize dust generation and accumulation.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

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## Section 11: TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion of dusts generated during working operations may cause nausea and vomiting.
<b>Inhalation</b>	Dust may irritate respiratory system.
<b>Skin contact</b>	Direct contact may irritate.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation. Dust may irritate respiratory system.

### Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.

<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity-single exposure</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ toxicity-repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

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## Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	The product is expected to be biodegradable.
Bioaccumulative potential	The product is not expected to bioaccumulate.
Mobility in soil	Not available.
Other adverse effects	Not available.

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## Section 13: WASTE DISPOSAL CONSIDERATIONS

### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

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## Section 14: TRANSPORTATION INFORMATION

Not a DOT controlled material.

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## Section 15: REGULATORY

**US federal regulations** This product is hazardous according to OSHA 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - No  
 Delayed Hazard - No  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)** Not regulated.

### Other federal regulations

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance** Not listed.

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**Section 16: OTHER**

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (THE HAZARD COMMUNICATION STANDARD)

The information accumulated herein is believed to be accurate, but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.