



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** Distillers Dried Grains  
**Version #** 01  
**Issue date** 06-08-2012  
**Revision date** -  
**Supersedes date** -  
**CAS #** Mixture  
**Manufacturer/Supplier** Valero Marketing & Supply Company and Affiliates  
P.O. Box 696000  
San Antonio, TX 78269-6000  
**General Assistance** 210-345-4593  
**Emergency** 24 Hour Emergency 866-565-5220  
1-800-424-9300 (CHEMTREC USA)

## 2. Hazards Identification

**Physical state** Solid.  
**Appearance** Golden to tan powder.  
**Emergency overview** WARNING!  
May form combustible dust concentrations in air (during processing).  
**OSHA regulatory status** This product is hazardous according to OSHA 29 CFR 1910.1200.  
**Potential health effects**  
**Eyes** Direct contact with eyes may cause temporary irritation.  
**Skin** May cause skin irritation.  
**Inhalation** Dust may irritate respiratory system.  
**Ingestion** No known harmful effects.  
**Potential environmental effects** 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.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
Distillers Dried Grains	N/A	100

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First Aid Measures

**First aid procedures**  
**Eye contact** 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.  
**Skin contact** Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.  
**Inhalation** If symptomatic, move to fresh air. If respiratory problems, administer artificial respiration/oxygen. Get medical attention if symptoms persist.  
**Ingestion** Seek medical attention if discomfort persists.  
**Notes to physician** Treat symptomatically.

## 5. Fire Fighting Measures

**Flammable properties** 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.

**Extinguishing media****Suitable extinguishing media**

Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Fire fighting equipment/instructions**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Hazardous combustion products**

None known.

**6. Accidental Release Measures****Personal precautions**

Wear appropriate personal protective equipment (See Section 8).

**Environmental precautions**

Environmental manager should be informed of all releases, as necessary. Reporting of releases to appropriate regulatory agencies may be required.

**Methods for cleaning up**

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.

**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.

**8. Exposure Controls / Personal Protection****Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	TWA	3 mg/m <sup>3</sup>	Respirable particles.
		10 mg/m <sup>3</sup>	Inhalable particles.

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

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	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)**

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	TWA	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	TWA	3 mg/m <sup>3</sup>	Respirable particles.
		10 mg/m <sup>3</sup>	Total particulate.

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	TWA	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Total dust.

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	Inhalable

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value	Form
Distillers Dried Grains (CAS N/A)	TWA	10 mg/m3	Total dust.

**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.

**Personal protective equipment**

<b>Eye / face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact glove manufacturer for specific information.
<b>Respiratory protection</b>	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.
<b>General hygiene considerations</b>	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.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Golden to tan powder.
<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Color</b>	Golden to tan.
<b>Odor</b>	Slightly toasted smell
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Boiling point</b>	Not available.
<b>Melting point/Freezing point</b>	Not available.
<b>Solubility (water)</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Flash point</b>	Not available.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Other data</b>	
<b>Weighted solids</b>	~90%

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Material is stable under normal conditions.
<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.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

## 11. Toxicological Information

**Sensitization** No sensitizing effects known.  
**Acute effects** Dusts may irritate the respiratory tract, skin and eyes.  
**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

## 12. Ecological Information

**Ecotoxicity** No data available.  
**Persistence and degradability** The product is expected to be biodegradable.  
**Bioaccumulation / Accumulation** The product is not expected to bioaccumulate.  
**Mobility in environmental media** No data available.

## 13. Disposal Considerations

**Disposal instructions** Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport Information

**DOT**  
Not regulated as a hazardous material by DOT.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

**TDG**  
Not regulated as dangerous goods.

## 15. Regulatory Information

**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.

**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)**  
None

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

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

**Section 302 extremely hazardous substance (40 CFR 355, Appendix A)** No

**Section 311/312 (40 CFR 370)** Yes

**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)** Not controlled

**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status** Non-controlled

**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 - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

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

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**Mexico regulations**

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

**16. Other Information**

**Further information**

HMIS® is a registered trade and service mark of the NPCA.

**HMIS® ratings**

Health: 1  
Flammability: 1  
Physical hazard: 0

**NFPA ratings**

Health: 1  
Flammability: 1  
Instability: 0

**Disclaimer**

This Material Safety Data Sheet (MSDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this MSDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.