



# SAFETY DATA SHEET

## 1. Identification

Product identifier	Distillers Dried Grains with Solubles
Other means of identification	Not available.
Recommended use	Not available.
Recommended restrictions	None known.

### Manufacturer / Importer / Supplier / Distributor information

Manufacturer/Supplier	Valero Marketing & Supply Company and Affiliates One Valero Way San Antonio, TX 78269-6000 210-345-4593 CorpHSE@valero.com
General Assistance	Industrial Hygienist
E-Mail	24 Hour Emergency 866-565-5220
Contact Person	1-800-424-9300 (CHEMTREC USA)
Emergency Telephone	

## 2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Combustible dusts
Label elements	
Hazard symbol	None.
Signal word	Warning
Hazard statement	May form combustible dust concentrations in air.
Precautionary statement	
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)	Not classified.

## 3. Composition/information on ingredients

### Mixtures

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

Inhalation	If symptomatic, move to fresh air. If respiratory problems, administer artificial respiration/oxygen. Get medical attention if symptoms persist.
Skin contact	Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.
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.
Ingestion	Seek medical attention if discomfort persists.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Dust may irritate respiratory system.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.

## 5. Fire-fighting measures

Suitable extinguishing media	Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
Unsuitable extinguishing media	Not available.

Distillers Dried Grains with Solubles

915077

Version #: 01

Revision date: 13-August-2011; Print date: 14-August-2013

Prepared by 3E Company

1 / 6

Specific hazards arising from the chemical

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.

Special protective equipment and precautions for firefighters

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

Fire-fighting equipment/instructions

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

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate personal protective equipment (See Section 8).

Methods and materials for containment and cleaning up

Absorb spill with vermiculite or other inert material, then place 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.

Small Spills: Prevent runoff from entering drains, sewers, or streams. Nonsparking tools should be used.

Environmental precautions

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

## 7. Handling and storage

Precautions for safe 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.

Conditions for safe storage, including any incompatibilities

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

Components	Type	Value	Form
Dried Distillers Grains with Solubles (CAS -)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust

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

Components	Type	Value	Form
Dried Distillers Grains with Solubles (CAS -)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust
		50 millions of particle	Total dust
		15 millions of particle	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Dried Distillers Grains with Solubles (CAS -)	TWA	3 mg/m3	Respirable particles.
		10 mg/m3	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).

Distillers Dried Grains with Solubles

915077

Version #: 01

Revision date: 13-August-2011; Print date: 14-August-2013

Prepared by 3E Company

<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves.
<b>Other</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>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<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 and chemical properties

<b>Appearance</b>	Brown granular
<b>Physical state</b>	Solid.
<b>Form</b>	Granular.
<b>Color</b>	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>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</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>	
<b>Weighted solids</b>	~90%

## 10. Stability and reactivity

<b>Reactivity</b>	The product is non-reactive under normal conditions of use, storage and transport.
<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.



## 11. Toxicological information

### Information on likely routes of exposure

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

### Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory sensitization	Based on available data, the classification criteria are not met.
Skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

## 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.

## 13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local 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 a dangerous good.
IMDG	Not regulated as a dangerous good.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

## 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.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed.

Distillers Dried Grains with Solubles

915077

Version #: 01

Revision date: 13-August-2011; Print date: 14-August-2013

Prepared by 3E Company

**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 - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** Yes

**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.

**Food and Drug Administration (FDA)** 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 regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**US. Rhode Island RTK**

Not regulated.

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

Not listed.

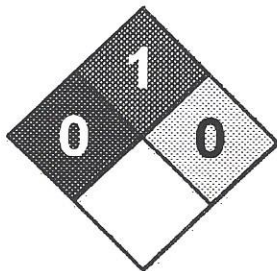
**16. Other information, including date of preparation or last revision**

**Issue date** 13-August-2013

**Revision date** -

**Version #** 01

**NFPA Ratings**

**References**

EPA: AQUIRE database  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
HSDB® - Hazardous Substances Data Bank  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices