



Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Distillers Dried Grains with Solubles

Synonyms: DDG; DDGS; Distillers' Grains; Distillers' Dried Grains.

Product Use: Animal feed.

Manufacturer/Supplier: Husky Oil Operations Ltd.
PO Box 6525 Station 'D'
Calgary, Alberta
T2P 3G7

Phone Number: 403-298-6111

Emergency Phone: Husky 24-Hour Emergency Number: 1-877-262-2111

Date of Preparation: July 11, 2014

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING
COMBUSTIBLE DUST MAY FORM COMBUSTIBLE
(EXPLOSIVE) DUST- AIR MIXTURES. MAY
IRRITATE EYES AND SKIN.

Colour: Light brown. Yellowish.
Physical State: Solid.
Odour: Cooked bread. Corn.

| WHMIS | Personal Protection Equipment | TDG (Ground) |
|---------------------------|-------------------------------------------------------------------------------------|----------------|
| Not a controlled product. |  | Not regulated. |

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Inhalation: Inhalation of dust may cause respiratory tract irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Eye: Exposure to dust may be irritating to eyes. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin: Exposure to fibers may be irritating to skin. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: Ingestion of product is unlikely to result in acute effects. May cause gastrointestinal irritation.

Medical Conditions Aggravated By Exposure: Not available.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system.

Potential Environmental Effects: See Section 12 for more information.



This material is not considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS No. | % wt./wt. |
|----------------------------------------|----------------|------------------|
| Distillers' Dried Grains with Solubles | Not available. | 88 |
| Water | 7732-18-5 | 12 |

Section 4: FIRST AID MEASURES

- Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.
- Eye Contact:** If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell.
- Skin Contact:** If on skin: Wash with plenty of soap and water for at least 15 minutes. Call a poison center or doctor if you feel unwell.
- Ingestion:** If swallowed: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Health effects upon exposure to this feed product are anticipated to be minimal.

Section 5: FIRE FIGHTING MEASURES

- Flammability:** Material may form explosive dust-air mixture. Avoid pilot lights, other flames, sparks, heaters, electrical equipment, static discharges, or other ignition sources.
- Means of Extinction**
- Suitable Extinguishing Media:** Flood with water. Use carbon dioxide or dry chemical for small fires. Move containers from fire area if you can do it without risk.
- Unsuitable Extinguishing Media:** Not available.
- Products of Combustion:** Oxides of carbon.
- Protection of Firefighters:** Apply extinguishing media carefully to avoid creating airborne dust. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.
- Explosion Data**
- Sensitivity to Mechanical Impact:** This material is not sensitive to mechanical impact.
- Sensitivity to Static Discharge:** In the form of dust, this material is sensitive to static discharge and may form explosive mixtures with air. This



material is not sensitive to static discharge. Take precautions to prevent static electricity build-up before, during and after activities that may produce airborne dust.

Section 6: ACCIDENTAL RELEASE MEASURES

- Emergency Procedures:** Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Personal Precautions:** Do not touch or walk through spilled material. Use personal protection recommended in Section 8.
- Environmental Precautions:** Keep out of drains, sewers, ditches, and waterways.
- Methods for Containment:** Do not flush to sewer or allow to enter waterways.
- Methods for Clean-Up:** Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used. Dust can be a fire or explosion hazard. Use explosion-proof equipment. Sweep up and shovel into suitable containers for disposal.
- Other Information:** See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:

Do not breathe dusts. Do not swallow. Avoid contact with skin and eyes. Handle and open container with care. Combustible dust clouds may be created where operations produce fine material (dust). Take precautions to prevent static electricity build-up before, during and after activities that may produce airborne dust. When using do not eat or drink. Wash hands before eating, drinking, or smoking. See Section 8 for information on Personal Protective Equipment.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep away from heat, sparks and open flame. Keep container closed. To avoid fire or explosion, ground and bond container and receiving equipment (and ground personnel) before transferring material. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component

Distillers' Dried Grains with Solubles [CAS No. Not available]

ACGIH: 4 mg/m³ (TWA); (1985); For Grain dust (oat, wheat, barley).

OSHA: 10 mg/m³ (TWA); For Grain dust (oat, wheat, and barley).

Water [CAS No. 7732-18-5]

ACGIH: No TLV established.

OSHA: No PEL established.



Husky Energy

MATERIAL SAFETY DATA SHEET

Distillers Dried Grains with Solubles

Date of Preparation: July 11, 2014

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

TWA: Time-Weighted Average

Engineering Controls: Use explosion-proof electrical, ventilating, and lighting equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Safety glasses are recommended. Indirect vented, dust-tight goggles are required if dust is generated when handling this product. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3-92 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Hand Protection: Wear protective gloves. Consult manufacturer specifications for further information.

Skin and Body Protection: Wear protective clothing.

Respiratory Protection: If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-11, with particulate filter, or self-contained breathing apparatus must be used.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Opaque. Granular.
Colour: Light brown. Yellowish.
Odour: Cooked bread. Corn.
Odour Threshold: Not available.
Physical State: Solid.
pH: Not available.
Viscosity: Not available.
Melting Point: Not available.
Boiling Point: Not available.
Flash Point: Not available.
Evaporation Rate: Not available.
Lower Flammability Limit: Not available.
Upper Flammability Limit: Not available.



Vapor Pressure: Not available.
Vapor Density: Not available.
Specific Gravity: Not available.
Density: Not available.
Solubility in Water: Not available.
Coefficient of Water/Oil Distribution: Not available.
Auto-ignition Temperature: Not available.
Percent Volatile, wt. %: 12
VOC content, wt. %: Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.
Conditions of Reactivity: Contact with incompatible materials. Exposure to heat. Sources of ignition.
Incompatible Materials: Not available.
Hazardous Decomposition Products: Not available.
Possibility of Hazardous Reactions: None known.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral: Not available.
Dermal: Not available.
Inhalation: Not available.

Component Toxicity

| Component | CAS No. | LD ₅₀ oral | LD ₅₀ dermal | LC ₅₀ |
|----------------------------------------|----------------|-----------------------|-------------------------|------------------|
| Distillers' Dried Grains with Solubles | Not available. | Not available. | Not available. | Not available. |
| Water | 7732-18-5 | > 90 mL/kg (rat) | Not available. | Not available. |

Inhalation: Inhalation of dust may cause respiratory tract irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
Eye: Exposure to dust may be irritating to eyes. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
Skin: Exposure to fibers may be irritating to skin. Signs/symptoms may include localized redness, swelling, and itching.



Ingestion: Ingestion of product is unlikely to result in acute effects. May cause gastrointestinal irritation.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by ACGIH, IARC, OSHA, or NTP.

Mutagenicity: Not available.

Reproductive Effects: Not available.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Not available.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not anticipated to be toxic to the environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.



Husky Energy

MATERIAL SAFETY DATA SHEET

Distillers Dried Grains with Solubles

Date of Preparation: July 11, 2014

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated.

Class: Not applicable.

UN Number: Not applicable.

Packing Group: Not applicable.

Label Code: Not applicable.

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)

The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification: Not a controlled product.

Hazard Symbols: None.

United States

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

No components are listed.

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

No components are listed.

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

No components are listed.



Husky Energy

MATERIAL SAFETY DATA SHEET

Distillers Dried Grains with Solubles

Date of Preparation: July 11, 2014

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

No components are listed.

California

California Prop 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16: OTHER INFORMATION

Disclaimer: The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

MSDS Expiry Date (Canada): July 10, 2017

Version: 2.0

MSDS Prepared by: **Deerfoot Consulting Inc.**

Phone: (403) 720-3700