SINGLETRACK

Safety Data Sheet

Distillers Dried Grains with Solubles

SECTION 1 – PRODUCT AND SUPPLIER IDENTIFICATION

Product:	Distillers Dried Grains with Solubles
Supplier:	SingleTrack Solutions Corp
Address:	4838 Richard Road SW, Calgary, Alberta, Canada T3E 6L1
Office:	1-587-353-4119
Emergency (24hr):	1-888-226-8832 (CANUTEC)

Product detail

Product Name : Distillers Dried Grains with Solubles
Synonyms: DDGS
CAS No.: N/A

SECTION 2 – HAZARD(S) IDENTIFICATION

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Combustible dust
Label elements	
Hazard symbol	N/A
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) None known.

SECTION 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.

SECTION 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.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Unsuitable extinguishing media

Not available

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

SECTION 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.

SECTION 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.

SECTION 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.
Components		10mg/m3	Respirable 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
Wear appropriate thermal protective clothing, when necessary**.**

General hygiene considerations
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.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brown granular
Physical state	Solid.
Form	Granular.
Color	Brown.
Odor	Slightly toasted smell
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.

Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Weighted solids	~90%

SECTION 10 – STABILITY AND REACTIVITY

Reactivity

Not available.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Heat, sparks, flames, elevated temperatures. Minimize dust generation and accumulation.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 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 or skin sensitization

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.

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.

SECTION 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.

SECTION 14 – TRANSPORATION INFORMATION

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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SECTION 15 – REGULATORY INFORMATION

Canadian Regulations: This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no) *
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product are listed on the inventory administered by the governing country(s) or are exempt.
A "No" indicates that one or more components of the product are not listed on the inventory administered by the governing country(s)

SECTION 16 – OTHER INFORMATION

SingleTrack Solutions provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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