



Green Plains

GHS SAFETY DATA SHEET

WET DISTILLERS GRAIN

SDS DATE: 04/17/2019

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (GHS Product Identifier): Wet Distillers Grains
(Other means of Identification): WDG, WDGS, Distillers Grains

PRODUCT INTENDED USE AND RESTRICTION: Animal feed

MANUFACTURER: Green Plains, Inc.
DIVISION:

Green Plains Atkinson LLC. 87590 Hill Crest Rd. Atkinson, NE 68713 P.O. Box 391, Atkinson, NE 68713 Phone: 402-925-5570 Fax: 402-925-2988 <input checked="" type="checkbox"/>	Green Plains Central City LLC. 214 20 th St., Central City, NE 68826 Phone: 308-946-9700 Fax: 308-946-2623 <input checked="" type="checkbox"/>	Green Plains Fairmont LLC. 1125 N Bixby Road, Fairmont, MN 56031 Phone: 507-238-3600 Fax: 507-238-3624 <input checked="" type="checkbox"/>	Green Plains Hereford LLC 4300 County Road 8 Hereford, TX 79045 Phone: 806-258-7800 Fax: 806-258-7801 <input checked="" type="checkbox"/>	Green Plains Madison LLC 395 Bissell St Madison, IL 63060 Phone: 618-451-4420 Fax: 618-452-8946 <input checked="" type="checkbox"/>
Green Plains Mt Vernon LLC 8999 W Franklin Rd Mt Vernon, IN 47620 Phone: 812-985-4023 Fax: 812-985-9983 <input checked="" type="checkbox"/>	Green Plains Obion LLC. 2098 McDonald Rd., Rives, TN 38253/P.O. Box 95, Obion, TN 38240 Phone: 731-536-1286 Fax: 731-536-1434 <input checked="" type="checkbox"/>	Green Plains Ord LLC. 48267 Val-E Road, Ord, NE 68862 Phone: 308-496-4823 Fax: 308-496-4890 <input checked="" type="checkbox"/>	Green Plains Otter Tail LLC. 24096 170th Ave., Fergus Falls, MN 56537 Phone: 218-998-4301 Fax: 218-998-4302 <input checked="" type="checkbox"/>	Green Plains Shenandoah LLC. 4124 Airport Rd., Shenandoah, IA 51601 Phone: 712-246-2932 Fax: 712-246-3988 <input checked="" type="checkbox"/>
Green Plains Superior LLC. 1495 320th Ave, Superior, IA 51363 Phone: 712-858-4666 Fax: 712-858-4684 <input checked="" type="checkbox"/>	Green Plains Wood River LLC. 7874 South 140th Road, Wood River, NE 68883 Phone: 308-385-1200 Fax: 308-385-9990 <input checked="" type="checkbox"/>	Green Plains York LLC 1414 County Rd O York, NE 68467 Phone: 402-362-2285 Fax: 402-362-7041 <input checked="" type="checkbox"/>		
Green Plains Grain Company LLC. Archer 2132 Archer Road Archer, NE 68816 Phone: 308-795-2211 <input type="checkbox"/>	Green Plains Grain Company LLC. Cimarron 19016 Road I Kismet, KS 67859 Phone: 620-624-6296 Fax: 620-624-4411 <input type="checkbox"/>	Green Plains Grain Company LLC. Essex 411 North Street, Essex, IA 51638 Phone: 712-379-3155 Fax: 712-379-3175 <input type="checkbox"/>	Green Plains Grain Company LLC. Hopkins 200 N. Railroad Hopkins, MO 64461 Phone: 660-778-3331 Fax: 660-778-3676 <input type="checkbox"/>	<input type="checkbox"/>

CHEMTREC PHONE (24HR Emergency Telephone): 1-800-424-9300 (Within U.S.A)
INTERNATIONAL CHEMTREC CALL: 1-703-527-3887
OTHER CALLS: 1-402-884-8700 (M-F, 8 AM-5 PM, Central time (U.S.A & Canada); within U.S.A)

FAX PHONE: 1-402-884-8776 (M-F, 8 AM-5 PM, Central time (U.S.A & Canada); within U.S.A)

SECTION 1 NOTE: None Available

SECTION 2: HAZARDS IDENTIFICATION

GHS LABELING AND CLASSIFICATION: This product meets the definition of the following hazard classes as defined by the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

GHS CLASSIFICATION ACCORDING TO ANNEX II:

HEALTH	ENVIRONMENTAL	PHYSICAL
Not classified	Not classified	Not classified
SIGNAL WORD:	NONE	
SYMBOL:	N/A	
HAZARD STATEMENT:	None	
PRECAUTIONARY STATEMENTS:	PREVENTIVE:	N/A
	RESPONSE:	N/A



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	STORAGE:	N/A
	DISPOSAL:	N/A

Any Regional Considerations: WDGS is considered non-hazardous.

SECTION 2 NOTES: N/A.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME: N/A
COMMON NAME: Distillers grains
CHEMICAL FAMILY: N/A
CHEMICAL FORMULA: N/A
SYNONYMS: N/A

INGREDIENT: Distillers grains and soluble water

<u>NAME</u>	<u>CAS#</u>	<u>EC#</u>	<u>ICSC#</u>	<u>% WT</u>	<u>% VOL</u>
water	7732-18-5	231-791-2	N/A	About 30%	N/A
Distillers grains	N/A	N/A	N/A	About 70%	N/A

CARCINOGENICITY

OSHA: NO **ACGIH:** NO **NTP:** NO **IARC:** NO
OTHER: N/A

IMPURITIES/STABILIZING ADDITIVES IDENTIFICATION: N/A

IMPURITIES/STABILIZING ADDITIVES CLASSIFICATION (if applicable): N/A

SECTION 3 NOTES: None Available

SECTION 4: FIRST AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EMERGENCY OVERVIEW: Wet distillers grains are an animal feed product. Health effects upon exposure or ingestion are expected to be minimal.

ROUTES OF ENTRY/FIRST AID: ingestion and eye contact

EYES CONTACT: Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately

SKIN CONTACT: Fibers may mildly irritate skin. Flush contaminated area with water for at least 15 minutes. If irritation occurs seek medical attention

INHALATION: Dust from this product is categorized as a nuisance particulate. May cause irritation upon respiration; Remove victim to fresh air.

INGESTION: No acute hazard would be posed from ingestion of product. Do not induce vomiting.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/A

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Wet distillers grains are an animal feed product. Health effects upon exposure or ingestion are expected to be minimal.

SECTION 4 NOTES: None Available

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use appropriate extinguishing media for surrounding fire

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS: N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

(Define specific hazards arising from the chemical e.g., nature of any hazardous combustion products)



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HAZARDOUS DECOMPOSITION PRODUCTS: N/A

FLAMMABLE LIMITS IN AIR (% by volume): N/A

UPPER LIMIT:

LOWER LIMIT:

FLASH POINT: N/A

F:

C:

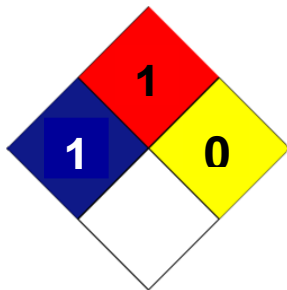
METHOD USED: N/A

AUTOIGNITION TEMPERATURE: N/A

F:

C:

NFPA HAZARD CLASSIFICATION:



HEALTH=1
FLAMMABILITY=1
REACTIVITY=0
OTHER=N/A

HMIS HAZARD CLASSIFICATION (0-4 scale):

Wet Distillers Grain	
HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B
Safety glasses, gloves	

SECTION 5 NOTES: None Available

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: N/A

ENVIRONMENTAL PRECAUTIONS: Keep the product away from sewer, and natural water bodies

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: For land spill: eliminate ignition sources; isolate hazard area; remove spilled material so as to avoid creating airborne dust. For water spill: material is a natural material; small spills will dilute naturally with the water and will biodegrade.

SECTION 6 NOTES: None Available

SECTION 7: HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING: Use appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands after handling.

CONDITIONS FOR SAFE STORAGE (any incompatibilities): Store in accordance with local and state regulations. Keep away from heat, flame or sparks. Use appropriate containments to avoid environmental contamination.

SECTION 7 NOTES: None Available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

INGREDIENTS	ACGIH	NIOSH	OSHA-FINAL PELs
Wet Distillers Grain	4 mg/m ³ TLV	4 mg/m ³	10 mg/m ³



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ENGINEERING CONTROLS: N/A

VENTILATION: N/A

PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYE PROTECTION: Wear eye protection suitable to the hazard

SKIN PROTECTION: Wear hand protection suitable to the hazard

RESPIRATORY PROTECTION: Not required in normal.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

SECTION 8 NOTES: None Available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Brown moist Granular solid

PHYSICAL STATE: solid

COLOR: Brown

ODOR: Cooked corn odor

pH AS SUPPLIED: 3 to 4

pH (Other): N/A

FREEZING POINT: N/A

F:
C:

BOILING POINT: N/A

F:
C:

MELTING POINT: N/A

F:
C:

FLASH POINT: N/A

F:
C:

EVAPORATION RATE (BASIS=1): N/A

FLAMMABILITY (by %volume): N/A

UPPER FLAMMABILITY LIMIT:
LOWER FLAMMABILITY LIMIT:

VAPOR PRESSURE (mmHg): N/A

@

F:
C:

VAPOR DENSITY (AIR = 1): N/A

@

F:
C:

SOLUBILITY IN WATER: N/A

PARTITION COEFFICIENT n-octanol/water: N/A

AUTO-IGNITION TEMPERATURE: N/A



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F:
C:

DECOMPOSITION TEMPERATURE: N/A

F:
C:

SPECIFIC GRAVITY (H2O = 1): N/A

@

F:
C:

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A

BY WT/BY VOL @

F:
C:

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER:

LBS/GAL

WITHOUT WATER:

LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY: N/A

@

F:
C:

SECTION 9 NOTES: None Available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: The product is stable in normal conditions.

STABILITY: This product is stable. The product will lose moisture if not stored in a sealed container. It is susceptible to microbial growth with prolonged storage

CONDITIONS TO AVOID (STABILITY): N/A

POSSIBILITY OF HAZARDOUS REACTIONS: N/A

INCOMPATIBILITY MATERIAL: N/A

HAZARDOUS DECOMPOSITION PRODUCTS: Burning can produce carbon monoxide and/or carbon dioxide

SECTION 10 NOTES: None Available

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: The toxicity data of this product has not been determined by testing or research, but to our best knowledge, this product is non-toxic.

ROUTES OF EXPOSURE: ingestion and eye contact

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

CONTACT WITH EYES: Dust may cause eye irritation

CONTACT WITH SKIN: Fibers may mildly irritate skin

INHALATION: Dust from this product is categorized as a nuisance particulate

INGESTION: No acute hazard would be posed from ingestion of this product



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DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE: Prolonged or repeated exposure to dust can result in asthma, bronchitis, chronic obstructive pulmonary disease, conjunctivitis, dermatitis, rhinitis and/or grain fever

NUMERICAL MEASURES OF TOXICITY:

LD50/LC50: No data available

IRRITATION DATA: No data available

CARCINOGENICITY: No data available

EPIDEMIOLOGY: No data available

TERATOGENICITY: No data available

REPRODUCTIVE EFFECTS: No data available

NEUROTOXICITY: No data available

MUTAGENICITY: No data available

OTHER: No data available

SECTION 11 NOTES: None Available

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY (AQUATIC AND TERRESTRIAL, WHERE AVAILABLE): No data available

PERSISTENCE AND DEGRADABILITY: Expect to be biodegradable

BIOACCUMULATIVE POTENTIAL: N/A

MOBILITY IN SOIL: N/A

OTHER ADVERSE EFFECTS: N/A

SECTION 12 NOTES: Due to the high content of organics in the product, it is expected to consume massive amount of oxygen once it gets into natural water body. It would result in death of aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Waste disposal should be in accordance with local, state, and federal regulations.

RCRA HAZARD CLASS: N/A

DESCRIPTION OF WASTE RESIDUES AND INFORMATION ON THEIR SAFE HANDLING AND METHODS OF DISPOSAL, INCLUDING ANY CONTAMINATED PACKAGING: N/A

SECTION 13 NOTES: None Available

SECTION 14: TRANSPORT INFORMATION

U.N. GHS TRANSPORT REQUIREMENT

UN NUMBER: N/A

PROPER SHIPPING NAME: N/A

TRANSPORT HAZARD CLASS: N/A

PACKING GROUP: N/A

LABEL STATEMENT: N/A

MARINE POLLUTANT: N/A

SPECIAL PRECAUTIONS FOR USER: N/A

SECTION 14 NOTES: WDGS is a cargo that may exhibit minor self-heating when transported in bulk by vessel but evidence suggests that the probability of a fire with this cargo is very low.



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SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TOXIC SUBSTANCE CONTROL ACT (TSCA): N/A

OCCUPATIONAL, SAFETY AND HEALTH ADMINISTRATION (OSHA): N/A

COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT (CERCLA): N/A

CLEAN WATER ACT (CWA): N/A

CLEAN AIR ACT (CAA): N/A

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III INFORMATION:

SARA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: N/A

SARA SECTION 311/312 (40 CFR 370) HAZARD CATEGORIES: N/A

SARA 313 REPORTABLE INGREDIENTS: N/A

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

SECTION 15 NOTES: None Available

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Green Plains Inc. be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Green Plains Inc. has been advised of the possibility of such damages.

REFERENCES:

GHS Annex II
GHS SDS Instruction

ACRONYMS/ABBREVIATIONS:

ACGIH-American Conference of Governmental Industrial Hygienists
 CAA-Clean Air Act
 CAS-Chemical Abstracts Service
 CERCLA-Comprehensive Response Compensation and Liability Act
 CHEMTREC-It serves as a round-the-clock resource for obtaining immediate response information for incidents involving hazardous material and dangerous goods.
 CWA-Clean Water Act
 EC-European Commission
 GHS-Globally Harmonized System of Classification and Labeling of Chemicals
 IARC-International Agency for the Research on Cancer
 ICSC-International Chemical Safety Cards
 LC50-The concentration of a chemical in air or of a chemical in water which causes the death of 50% of a group of test animals.
 LD50-The amount of a chemical, given all at once, which causes the death of 50% of a group of test animals.
 NIOSH-The National Institute for Occupational Safety and Health
 NTP-National Toxicology Program
 OSHA-Occupational Safety and Health Administration
 RCRA-Resource Conservation and Recovery Act
 RQ-Reportable Quantity
 SARA-Superfund Amendments and Reauthorization Act
 STOST-SE-Specific Target Organ Toxicity Single Exposure
 TPQ-Threshold Planning Quantity
 TSCA-Toxic Substance Control Act
 U.N.-United Nation
 UNCED-United Nations Conference on Environment and Development
 VOL-Volume
 WT-Weight