

ADM Technical Services | 4666 Faries Parkway, Decatur IL 62526 P: 800.238.9026 | F: 217.451.2153 | CPTechService@adm.com

PACKET INDEX CORNSWEET® CRYSTALLINE FRUCTOSE

Product codes: 010034

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FDA Registration of Facilities

The U.S. Public Health Security and Bioterrorism Preparedness Response Act of 2002 requires registration with the U.S. Food and Drug Administration of facilities that manufacture, process, pack, or hold food for human or animal consumption in the United States. The 2010 Food Safety Modernization Act requires a re-registration of these facilities prior to December 31, 2010 and biennially thereafter.

ADM Corn Processing manufacturing facilities and terminals within our distribution network have completed the re-registration as part of these requirements.

If you have any questions, or would like to discuss in more detail, please feel free to contact us.

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Customs-Trade Partnership Against Terrorism (C-TPAT)

Archer Daniels Midland Co. (ADM) maintains a validated membership in the Customs-Trade Partnership Against Terrorism (C-TPAT) security initiative. ADM is committed to the continuous development of global supply chain security and subscribes to the C-TPAT 'Minimum Security Criteria'.

As stated in the C-TPAT 'Minimum Security Criteria', certified C-TPAT partners need to verify the participation status of other eligible C-TPAT business partners. To address this need, U.S. Customs and Border Protection (CBP) created the Status Verification Interface (SVI). The SVI allows consenting certified C-TPAT partners to verify the participation status of other consenting certified C-TPAT partners. Each party must have consented to the release of their company name among the C-TPAT membership.

ADM maintains its approach to actively encourage our suppliers, carriers, vendors, and all other business partners to engage in safe and secure supply chain security practices, consistent with CBP's 'Minimum Security Criteria'. ADM desires to widen global supply chain security by creating a broad partner base. If your company would send a request to monitor Archer Daniels Midland Co., it will be added to our growing C-TPAT partners.

To request to monitor the status of our organization, visit the Status Verification Interface page at: https://ctpat.cbp.dhs.gov/trade-web/svi

Our company can be found by searching "Archer Daniels Midland Company" within the Partner Search tab.

For more information about the C-TPAT portal, see the C-TPAT Portal 2.0 Trade User Manual.

Thank you for your genuine efforts to mitigate the risks associated with the global supply chain. Please do not hesitate to contact us if you have any questions.

Date Approved 2019-02-08



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Food Safety Modernization Act (FSMA) Compliance

ADM has a long history of delivering safe and quality human and animal food ingredients upon which we will continue to serve as a valued supplier to your business. We understand the higher level of food safety interconnectedness between each link of the U.S. food supply as expected by the passage of the Food Safety Modernization Act (FSMA) and promulgation of its Final Rules of the CFR 117, 121, and 507 by the U.S. Food and Drug Administrations (FDA). FSMA updates and compliance dates for Preventive Controls and Good Manufacturing Practices for Human and Animal Food, Sanitary Transportation, Foreign Supplier Verification, Food Fraud Prevention, and addressing Economically Motivated Adulteration have come into effect for ADM. As such, ADM has enacted and completed programs to comply.

There are further expectations on the level to which customers and suppliers understand each other's food safety plans including shared communications regarding hazard/risk mitigation. As a supplier, we are required to provide notice to customers if a food safety hazard has been identified in the processing or manufacturing of ingredients and a preventative control is in not in place to manage the hazard. In that situation, the customer will be provided written information describing the ingredient and the hazard identified during the risk assessment in which ADM determines that there is a hazard with no preventative control. Furthermore, a written confirmation must be provided back to ADM acknowledging acceptance of said product.

The FSMA final rule for Mitigation Strategies to Protect Food Against Intentional Adulteration established the requirements to implement a food defense plan. This law states that facilities are required to perform assessments to identify significant vulnerabilities and implement mitigation strategies to control these vulnerabilities. The mitigation strategies employed are modeled after HACCP-style program management components and developed using a science-based food defense vulnerability assessment model.

As always, ADM encourages you to communicate with us regarding any supply-chain preventive controls placed on our ingredients. Specifically, hazard(s) identified where there is reasonable probability that exposure to the hazard will result in serious adverse health consequences or death to humans or animals.

We look forward to continuing our commitment to supplying our customers with safe, high-quality products.

Date Approved 2019-01-08

Version 4.0



ORTHODOX UNION LETTER OF KOSHER CERTIFICATION

UNION OF ORTHODOX JEWISH CONGREGATIONS OF AMERICA איחוד קהילות האורתודוקסים באמריקה
ELEVEN BROADWAY / NEW YORK, NY 10004 / 212-613-8241 / KOSHERLETTER@OU.ORG / OUKOSHER.ORG

February 06, 2019

בס"ד

This is to certify that the following products produced for

ADM Carbohydrate Solutions, P.O. Box 1470, Decatur, IL 62525

at the specific company and plant pursuant to the terms set forth in the agreement between the OU, ADM Carbohydrate Solutions and the company, are manufactured under the supervision of the Kashruth Division of the Orthodox Union and are kosher as indicated below.

Product Name	UKD-ID	Status	Certification Requirements
Brand: Cornsweet			
010077 ADM Cornsweet® Pure Liquid Fructose	OUV7-E179961	Pareve	① Symbol required.
010077 ADM Cornsweet® Pure Liquid Fructose	OUV8-VXKE4SI	Pareve	Certified when bulk shipped in OU approved carriers.
Fructose (Crystalline) Fructose F (Crystalline)	OUV7-387C1DB OUV7-F49B10A	Pareve Pareve	 Symbol required. Symbol required.

Use of the OU trademark must comply with the terms set forth in a written agreement with the Orthodox Union. Any other use of the OU trademark is not authorized.

Maracha Strack

This certification is valid through 12/31/2019

Rabbi Menachem Genack, Rabbinic Administrator, CEO

Page 1 of 1

IFANCA HALAL PRODUCT CERTIFICATE

Document No.: ARC. PL. 1005. M. 180013. US

November 15, 2018

ARCHER DANIELS MIDLAND COMPANY

4666 Faries Parkway Decatur, IL 62526 USA

To Whom It May Concern:

This is to certify that **ARCHER DANIELS MIDLAND COMPANY** markets Halal products produced under the supervision of the Islamic Food and Nutrition Council of America (IFANCA) at the following location(s):

	Location	IFANCA Plant Code
1.	Lafayette, IN, USA	1004
2.	Loudoun, TN, USA	1006
3.	Decatur, Illinois	6459

The company may use the **Crescent-M Halal** logo, the IFANCA'S HALAL CERTIFICATION SYMBOL and marked, "PRODUCT OF USA."

- 1. ADM CORNSWEET Crystalline Fructose
- 2. ADM CORNSWEET Crystalline Fructose F
- 3. ADM CORNSWEET Pure Liquid Fructose

This certificate is valid until January 31, 2020 and subject to renewal at that time.

Muhammad Munir Chaudry, Ph.D.

President



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CornSweet® Crystalline Fructose Audit Summary (Product Code 010034)

A BRC Audit was conducted at the manufacturing facility for ADM's CornSweet® Crystalline Fructose in Lafayette, Indiana, on March 7, 2018, with no critical or major findings. This facility maintains its BRC Certification. The following table provides an Executive Summary of the audit.

If you have any questions, please do not hesitate to contact us.

ADM Technical Services

Date Approved 2018-05-21

Version 6.0



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EXE	CUTIVE SUMMARY: CornSweet® Crystalline Fructose Audit (March 7, 201	.8)
CATEGORY	SECTION	JUDGEMENT
1.0	1.1 Senior Management Commitment and Continual Improvement	No Finding
SENIOR MANAGEMENT COMMITMENT	1.2 Organizational Structure, Responsibilities and Management Authority	No Finding
2.0 THE FOOD SAFETY PLAN	– НАССР	Minor Finding
	3.1 Food Safety And Quality Manual	No Finding
	3.2 Documentation Control	No Finding
	3.3 Record Completion And Maintenance	No Finding
	3.4 Internal Audit	No Finding
3.0	3.5 Supplier And Raw Material Approval And Performance Monitoring	No Finding
OOD SAFETY AND	3.6 Specifications	No Finding
QUALITY MANAGEMENT	3.7 Corrective and Preventive Actions	No Finding
SYSTEMS	3.8 Control Of Non-Conforming Product	No Finding
	3.9 Traceability	No Finding
	3.10 Complaint Handling	No Finding
	3.11 Management Of Incidents, Product Withdrawal And Product Recall	No Finding
	3.12 Customer Focus And Communication	No Finding
	4.1 External Standards	No Finding
	4.2 Security	No Finding
	4.3 Layout, Product Flow And Segregation	No Finding
	4.4 Building Fabric, Raw Material Handling, Preparation, Processing, Packing And Storage Areas	No Finding
	4.5 Utilities – Water, Ice, Air And Other Gases	No Finding
	4.6 Equipment	No Finding
	4.7 Maintenance	No Finding
1.0	4.8 Staff Facilities	No Finding
SITE STANDARDS	4.9 Chemical And Physical Product Contamination Control	No Finding
	4.10 Foreign-Body Detection And Removal Equipment	No Finding
	4.11 Housekeeping and hygiene	No Finding
	4.12 Waste/waste disposal	No Finding
	4.13 Management of Surplus food and products for animal feed	No Finding
	4.14 Pest control	No Finding
	4.15 Storage facilities	No Finding
	4.16 Dispatch and transport	No Finding

Date Approved 2018-05-21 Version 6.0



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EXECUTIVE SUMMARY: CornSweet® Crystalline Fructose Audit (March 7, 2018)		
CATEGORY	SECTION	JUDGEMENT
	5.1 Product Design/Development	No Finding
	5.2 Product labeling	No Finding
F 0	5.3 Management of allergens	No Finding
5.0 PRODUCT CONTROL	5.4 Product authenticity, claims and chain of custody	No Finding
PRODUCT CONTROL	5.5 Product packaging	No Finding
	5.6 Product inspection and laboratory testing	No Finding
	5.7 Product release	No Finding
	6.1 Control of operations	No Finding
6.0	6.2 Labeling and pack control	No Finding
PROCESS CONTROL	6.3 Quantity, weight, volume and number control	No Finding
	6.4 Calibration and control of measuring and monitoring devices	No Finding
	7.1 Training	No Finding
7.0	7.2 Personal hygiene	No Finding
PERSONNEL	7.3 Medical screening	No Finding
	7.4 Protective clothing	No Finding

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CornSweet® Crystalline Fructose (Product Code 010034)

Product Information

Fructose, known for years as "Fruit Sugar" because of its natural occurrence in many fruits, is the sweetest of the natural sugars. Although chiefly used for its power where it can exhibit sweetness up to 1.8 times that of sucrose, fructose offers many unique benefits which today's food technologist can utilize to optimize product formulation and marketing strategies. Fructose offers the following benefits plus more:

- **Intense Sweetness**
- Humectancy
- High Osmotic Pressure Freezing Point Depression

- **Sweetness Synergism**

Low Water Activity

Maillard Browning

- Flavor Enhancement
- Cryoprotection
 - Granulation

Characteristics

Appearance White Free-Flowing Crystals Odor

None

Taste Clean, Very Sweet Thru #16 Mesh Sieve, % Min. 99 Thru #100 Mesh Sieve, % Max. 20

Chemical Specifications

Fructose, % Min.	99.5
Dextrose, % Max.	0.5
Loss on Drying, % Max.	0.5
Ash, % Max.	0.05
Heavy Metals, ppm Max.	5
Arsenic, ppm Max.	1
Chloride, % Max.	0.018
Lead, ppm Max.	0.1
HMF, % Max.	0.1
Sulfate, % Max.	0.025
Specific Rotation,%	98.0-102.0

Typical Weight/Volume Factors

lbs. /cubic ft.	50.0
g/ml	0.80

Labeling

Fructose

Regulatory Data

Country of Origin: United States

GRAS Affirmation

Meets FCC Specifications

Microbiological Specifications (per g Max.)

Mesophilic Bacteria	200
Yeast	10
Mold	10
Coliforms	10

Lot Coding

Example: AFYYMMDDBB AF = Internal Location YYMMDD = Year Month Day BB = Monthly Lot Number

Storage & Shelf Life

It is recommended that the product be stored at less than 50% relative humidity and not exceeding 30°C. If stored in recommended warehouse conditions, product quality will not change, and the shelf life will be better than eighteen months. However, shelf life is indefinite, and dependent upon the intended application's sensitivity to "warehouse set" or "caking" common to sugars.

Date Approved	Version	Document #		
2017-09-05	2.0	CBU.TS.SPEC.010034		

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CornSweet® Crystalline Fructose (Product Code 010034)

Allergen Information

The following major food allergens recognized under the US Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA) are not present in this product. This product is not manufactured with equipment that comes in contact with the listed allergens, nor do we have these allergens within the process areas. Sulfur dioxide, which is considered a sensitizer, can be used in the manufacture of this product, but residual levels will not exceed 10 ppm.

- cereals containing gluten
- peanuts and peanut products
- soybean and soy products
- tree nuts
- milk and dairy products
- wheat and wheat products
- crustaceans, mollusks and their products
- egg and egg products
- fish and fish products
- other allergens such as buckwheat, celery, cottonseed, mustard, mustard seed, rice, lupin, sesame seed and sunflower seeds

Nutrition Information (per 100g product)

Nutrient:		Other Essential Vita	mins and Minerals:
Total Calories	400 Kcal	Thiamine	0 mg
Calories from Saturated Fat	0 Kcal	Riboflavin	0 mg
Total Fat	0 g	Niacin	0 mg
Saturated Fat	0 g	Vitamin D	0 μg
Trans Fat	0 g	Vitamin E	0 mg alpha-tocopherol
Polyunsaturated Fat	0 g	Vitamin B-6	0 mg
Monounsaturated Fat	0 g	Folic Acid	0 μg DFE
Cholesterol	0 mg	Vitamin B-12	0 μg
Total Carbohydrates	99.8 g	Phosphorus	0.6 mg
Total Sugars	99.8 g	Iodine	0 μg
Sugar Alcohols	0 g	Magnesium	0.2 mg
Other Carbohydrates	0 g	Zinc	0 mg
Dietary Fiber	0 g	Copper	0.1 mg
Soluble Fiber	0 g	Biotin	0 μg
Insoluble Fiber	0 g	Pantothenic Acid	0 mg
Protein	0.01 g	Vitamin A	0 μg RAE
Calcium	0.1 mg	Vitamin C	0 mg
Iron	0.05 mg		
Sodium	0.2 mg		
Potassium	0.2 mg		

^{*}There have been no sugars added during the production process. The total sugars value represents the sugars in this finished ingredient. ADM is not listing added sugars on technical documents to lessen confusion for formulators when calculating their Nutrition Facts panel information.

 Date Approved
 Version
 Document #

 2017-09-05
 2.0
 CBU.TS.SPEC.010034

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Safety Data Sheet

Original Preparation Date: 24-Aug-2009 Revision Date: 27-Feb-2017 Revision Number: 1

1. Identification

Product Name: Product Code: Crystalline Fructose 010034

Use of the Substance / Preparation:

Food Ingredient

Contact Manufacturer: Archer Daniels Midland Company 4666 Faries Parkway Decatur. IL 62526, USA

Telephone Number: (+1) 217-424-5200

Emergency response telephone number: Chemtrec 1-800-424-9300 (CCN 1635)

2. Hazard(s) identification

Emergency Overview

Warning. May form combustible dust concentrations in air (during processing and handling). Product dust may cause mild, mechanical irritation.

AppearancePhysical StateOdorWhitePowderOdorless

This product IS classified as hazardous according to 29 CFR 1910.1200 (known as HCS 2012), amended to conform to the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Depending on the intended use, this product is classified as hazardous according to the criteria contained in the Hazardous Products Regulations (SOR/2015-17), also known as WHMIS 2015.

NOTE: Certain products covered under other Canadian legislation, including but not limited to cosmetics, devices, drugs or food (as defined in the Food and Drugs Act), pest control products (as defined in the Pest Control Products Act), consumer products (as defined in the Canada Consumer Product Safety Act), and Hazardous waste (being a hazardous product that is sold for recycling or recovery and is intended for disposal), are NOT subject to the label and SDS requirements of the Hazardous Products Regulations (SOR/2015-17), also known as WHMIS 2015. As supplied for use in food, an SDS and WHMIS compliant labeling are NOT required for this product. Since Canadian employers must still provide education and training on health effects, safe use, and storage, and in the interest of providing relevant product information to our customers, this SDS is being provided on a voluntary basis.

provided on a voluntary sacro	
OSHA Defined Hazard(s)	Combustible Dust
HPR Defined Hazard(s)	Combustible Dust

Label Elements

NOTE: While label elements are provided within this SDS, under 29 CFR 1910.1200 (b)(5), products already subject to the labeling requirements of other specified federal acts, may be exempt from OSHA labeling.

Signal Word:	Warning
Hazard Statement(s):	May form combustible dust concentrations in air.

3. Composition/information on ingredients

Common Name Crystalline Fructose

Chemical Family Sugars

Non-hazardous Components

Chemical Name	CAS-No	Weight %	North American Substance Hazard Class
D-Fructose	57-48-7	100	None known

4. First-aid measures

Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin Contact Wash off with warm water and soap.

Inhalation Move to fresh air.

Ingestion Health injuries are not known or expected under normal use.

Most important symptoms and affects, both acute and delayed

Eyes Contact with eyes may cause irritation.

Skin Product dust may cause mild, mechanical irritation.

Inhalation Dust may cause irritation of respiratory tract. See section 8 of this sheet for exposure limits pertaining to nuisance dust or "particulates not otherwise regulated".

Ingestion Health injuries are not known or expected under normal use.

Main Symptoms Irritating to respiratory system.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Special forms of treatment and immediate medical attention are not specified. Treat Symptomatically.

5. Fire-fighting measures

Flammable Properties

Powdered material may form explosive dust-air mixtures. Fine dust dispersed in air may ignite. Risk of ignition followed by flame propagation or secondary explosions should be prevented by avoiding accumulation of dust, e.g. on floors and ledges. As with most organic solids, combustion is possible at elevated temperatures or by contact with an ignition source.

Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None known.

Special hazards arising from the substance or mixture

Hazardous Combustion Products Carbon monoxide (CO), Carbon dioxide (CO₂).

Specific Hazards Arising from the None known.

Chemical

Sensitivity to mechanical impact No.

Sensitivity to static discharge Yes. (as dust).

Advice for fire-fighters

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<u>NFPA</u>

Health 0 Flammability 1 Stability and Reactivity 0
Physical hazard None known



Accidental release measures

Personal Precautions, Protective Equipment, and Emergency Procedures

Ensure adequate ventilation. Avoid dust formation.

Environmental Precautions

No special environmental precautions required. Prevent further leakage or spillage if safe to do so.

Methods and Materials for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal.

7. Handling and storage

Handling

Avoid dust formation in confined areas. Fine dust dispersed in air may ignite. Refer to NFPA 61, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities". Ensure adequate ventilation.

Storage

Keep in a dry, cool and well-ventilated place.

8. Exposure controls/Personal protection

Exposure Limits

Where exposure limits have not been established for specific components of this material, please observe the OSHA and ACGIH established limits for particulates not otherwise classified (PNOC). OSHA PEL: [15 mg/m³ (total dust) 8-hr TWA], [5 mg/m³ (respirable) 8-hr TWA]. ACGIH TLV: [10 mg/m³ (inhalable) 8-hr TWA], [3 mg/m³ (respirable) 8-hr TWA].

Biological Limit Values

No biological limit values have been listed for the component(s) of this product.

comply with the occupational exposure limits. However it is the duty of the user to verify this

and follow given exposure limits at the workplace.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

If exposed to airborne dust, appropriate safety glasses with side-shields or safety goggles

are recommended. If airborne dust concentrations are excessive, wear goggles.

Skin and Body Protection Respiratory Protection

Protective clothing and gloves may be worn to reduce the potential of mechanical irritation. If exposed to airborne dust, use appropriate NIOSH approved (or equivalent) respiratory

protection.



9. Physical and chemical properties

Appearance White
Physical State Powder
Odor Odorless

Odor Threshold No information available PH No information available

Flash Point Not applicable

Autoignition Temperature No information available

Boiling point

Melting/Freezing Point

Decomposition temperature

Oxidizing Properties

Not applicable

103 °C / 217 °F

No information available

No information available

Water SolubilitySolubleEvaporation RateNot applicableVapor PressureNot applicableVapor DensityNot applicable

Specific Gravity / Relative Density
Viscosity (kinematic)
Partition Coefficient

No information available
No information available

(n-octanol/water)

-

10. Stability and reactivity

Stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Avoid dust formation. Heat, flames and sparks.

Incompatible Materials No materials to be especially mentioned.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO₂),

11. Toxicological information

Information on toxicological effects

Acute toxicity	Based on available data, no evidence of acute toxicity.
Skin corrosion/irritation	Based on available data, not, or only slightly irritating.
Serious eye damage/eye irritation	Based on available data, no evidence of serious eye damage / irritation.
Respiratory or skin sensitisation	Based on available data, not expected to be a skin or respiratory sensitiser.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT - single exposure	No evidence of toxicity.
STOT - repeated exposure	No evidence of toxicity.
Aspiration hazard	Based on available data, no known aspiration hazard.

Potential health effects

Eyes Contact with eyes may cause irritation.

Skin Product dust may cause mild, mechanical irritation.

Inhalation Dust may cause irritation of respiratory tract. See section 8 of this sheet for exposure limits

pertaining to nuisance dust or "particulates not otherwise regulated".

Ingestion Health injuries are not known or expected under normal use.

Main Symptoms Irritating to respiratory system.

12. Ecological information

Ecotoxicity

Contains no substances known to be hazardous to the environment. Contains no substances known to be not degradable in waste water treatment plants.

Persistence/Degradability Biodegradable.

Mobility Soluble in water.

PBT and vPvB assessment
Other adverse effects
No information available.
Nothing specific known.

13. Disposal considerations

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods Dispose of in compliance with the laws and regulations pertaining to this product in your

jurisdiction.

14. Transport information

<u>Domestic transport regulations (USA)</u> DOT Not regulated.

Domestic transport regulations (Canada)

TDG Not regulated.

Domestic transport regulations (Mexico)

MEX Not regulated.

International transport regulations

ICAO Not regulated. IATA Not regulated. IMDG/IMO Not regulated.

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15. Regulatory information

International Inventories

The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	ICL	EINECS	ELINCS	AICS
D-Fructose	Yes	Yes	No	No	Yes 200-333-3	No	Yes

Chemical Name	ENCS ISHL	CHINA	PICCS	KECL	Taiwan	Turkey	NZIoC
D-Fructose	Yes (8)-47	Yes	Yes	Yes Annex 1 (KE-17262)	Yes	Yes 200-333-3	Yes

USA

Federal Regulations

Ozone Depleting Substances:

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 372.

CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product is not known to contain any chemicals which are subject to the reporting requirements of the Act or regulations contained in 40 CFR 103-302.

SARA 311/312 Hazardous Categorization

Refer to the OSHA hazard classification(s) provided in section 2 of this SDS.

Acute Health Hazard No Chronic Health Hazard No

Fire Hazard Yes (when in the form of combustible dust)

Sudden Release of Pressure Hazard No Reactive Hazard No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)

This product is not known to contain any HAPS.

State Regulations

State Right-to-Know

No known components subject to "Right-To-Know" legislation in the following States.

Canada

(NPRI) Canadian National Pollutant Release Inventory

No known component is listed on NPRI.

Mexico

Mexico - Grade Slight risk, Grade 1

16. Other information

Prepared By: ADM Corn Processing

Original Preparation Date: 24-Aug-2009
Revision Date: 27-Feb-2017

Revision Number:

Reason for revision: New SDS format. This version replaces all previous versions.

Abbreviations and acronyms

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

A4 - Not classifiable as a human carcinogen

ACGIH TLV - American Conference of Governmental Industrial Hygienists Threshold Limit Values

CAS - Chemical Abstract Service

Ceiling - Ceiling Limit Value: Concentrations that should never be exceeded at any given time (instantaneous)

CHINA - Chinese Inventory of Existing Chemical Substances (China)

CLP - Classification, Labelling and Packaging, Regulation (EC)1272/2008

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

Delisted - Substances Delisted from Report on Carcinogens

DNEL - Derived No Effect Level

DOT - U.S. Department of Transportation

DSL - Domestic Substance List (Canada)

EC - European Commission

EC No. - European Community number

EC50 - Half maximal effective concentration

EINECS - European Inventory of Existing Commercial Chemical Substances (EU)

ELINCS - European List of Notified Chemical Substances (EU)

ENCS - Existing and New Chemical Substances (Japan) / ISHL - Industrial Health and Safety Law (Japan)

EPCRA - Emergency Planning and Community Right-to-Know Act of 1986 (USA)

FOSFA - The Federation of Oils, Seeds and Fats Associations

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

Group 1 - Carcinogenic to Humans

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association Dangerous Goods Regulations

IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

ICAO - International Civil Aviation Organisation

ICL - In Commerce List (Canada)

IDLH - Immediately Dangerous to Life or Health

IMDG - International Maritime Dangerous Goods Code

IMO - International Maritime Organization

IUB - International Union of Biochemistry and Molecular Biology

KECL - Korean Existing and Evaluated Chemical Substances (Korea)

Known - Known Carcinogen

LC50 - Lethal concentration that produces fatalities in 50% of a given test population

LD50 - Median lethal dose of a given test population

Marpol - International Convention for the Prevention of Pollution From Ships

MEPC - Marine Environment Protection Committee

MEX - NOM-002-SCT/2003 List of Hazardous Substances and Materials Most Commonly Transported

MEXICO - Mexico Occupational Exposure Limits

NDSL - Non Domestic Substances List (Canada)

NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOAEL - No Observed Adverse Effect Level

NTP - National Toxicology Program

NZIoC - New Zealand Inventory of Chemicals (New Zealand)

OECD - Organisation for Economic Co-operation and Development

OSHA - Occupational Safety & Health Administration

OSHA PEL - Occupational Safety and Health Administration Permissible Exposure Limits

Revision Date: 27-Feb-2017

PICCS - Inventory of Chemicals and Chemical Substances (Philippines)

PNEC - Predicted No-Effect Concentration

Present - Carcinogen or potential carcinogen to be identified under OSHA's Hazard Communication Standard

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

SEN - Sensitizer notation. May reflect risk of dermal and/or inhalation sensitization (consult ACGIH documentation).

Skin notation - Potential for cutaneous absorbtion

STEL - Short Term Exposure Limit: Concentrations that should not be exceeded except for short periods of time (usually 15-minutes)

STOT - Specific Target Organ Toxicity

STV - Short Term Value (same as STEL)

TDG - Transportation of Dangerous Goods (Transport Canada)

TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA)

TWA - Time Weighted Average: Average concentration that should not be exceeded during a work day (usually 8-hours)

Under Consideration - Under Consideration by the National Toxicology Program

vPvB - Very Persistent and Very Bioaccumulative

WHMIS - Workplace Hazardous Materials Information System

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of sheet



Archer Daniels Midland Company Corn Processing Division

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Crystalline Fructose

Product Code 010034

Food Safety Plans are an integral piece of our quality and food safety systems. Crystalline Fructose is produced at the Lafayette, IN manufacturing facility. A cross-functional team of colleagues have reviewed annually, at a minimum, manufacturing hazard analysis and risk assessments to ensure accuracy and adequacy.

Allergens

Incoming processing aids used in the manufacture of crystalline fructose are declared free of allergens. As well, this product does not contain, nor is it manufactured with equipment that comes in contact with, the allergens listed under the US Food Allergen Labeling and Consumer Protection Act of 2004.

Biological Risk Summary

Crystalline fructose is not known to be associated with or support the growth of microorganisms due to pH, water activity, osmotic pressure, and production methods.

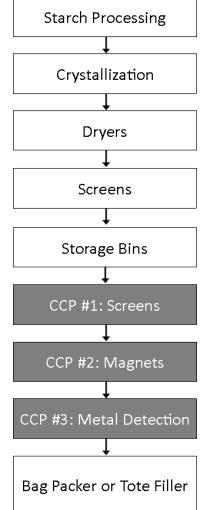
Chemical Risk Summary

ADM acknowledges mycotoxins, (e.g., aflatoxins and fumonisins) as well as pesticides are often of concern in corn derived products. It is well documented by the Corn Refiners Association that these materials are not present in crystalline fructose.

Physical Contamination

Considering all of the process steps and conditions, there are three Critical Control Points (CCPs) identified per package size in the manufacturing process of crystalline fructose. A simplified process flow diagram showing the major processing steps and CCPs is shown to the right. For all packaging types, the product is screened with a 16 mesh screen as it is transferred from the storage bins to the packaging line. Crystalline fructose then passes through rare earth magnets to remove

any foreign magnetic material. Finally, the product flows through an in-line metal detector with a flow diversion valve sensitive enough to detect metal 3.0 mm or larger.



Date Approved 2017-09-05

Versio 2

ADM

ARCHER DANIELS MIDLAND COMPANY

ADM DECATUR CORN PROCESSING 4666 FARIES PARKWAY DECATUR, IL 62565

CERTIFICATE OF ANALYSIS

CORNSWEET® CRYSTALLINE FRUCTOSE

(ADM PRODUCT CODE 010034)

This certificate of analysis is valid only for the shipment as described in the shipment information shown below.

SHIP TO: XXXXXX

CUSTOMER NAME

ADDRESS CITY, STATE

SHIPMENT INFORMATION

CONTAINER/LOT #: ADM ORDER #:

LOT CODE: SHIP DATE: CORDNO:

CONTAINER CODE: WEIGHT/QUANTITY:

PRODUCT ANALYSIS			
TEST	RESULT UNIT	LIMIT	REFERENCES
LOSS ON DRYING	%	0.5% MAX	USP
ASSAY	%	99.5% MIN	HPLC
ON US 16 MESH	%	1% MAX	ROTAP
THRU US 100 MESH	%	20% MAX	ROTAP
PRODUCT GUARANTEES			

THIS PRODUCT CONFORMS TO USP/FCC REQUIREMENTS.

This i hobber com only is to ost /i ce he contented in		
IDENTIFICATION	PASSES TEST	USP
COLOR OF SOLUTION	PASSES TEST	USP
ACIDITY	PASSES TEST	USP
HYDROXYMETHYLFURFUAL	PASSES TEST	USP
RESIDUE ON IGNITION	<0.05%	USP
CHLORIDES	<0.018%	USP
SULFATES	<0.025%	USP
HEAVY METALS	<5 PPM	USP
ARSENIC	<1 PPM	USP
CALCIUM AND MAGNESIUM (AS CA)	<0.005%	USP
DEXTROSE	<0.5%	HPLC
LEAD	<0.1 MG/KG	FCC

Certified Date: 01/04/2018 Certified By:



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Micro Statement

The following products are produced by high temperature evaporation, or crystallization, to obtain the finished product. The high osmotic pressure and low water activity of sweeteners creates an environment in which most organisms cannot survive. Finished products are tested on a regular basis for yeast, mold, and total plate count.

Allulose (JustSweet™)	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Corn Starch-Food and Moulding	Rice Syrups
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrup (CornSweet®)	

*Sourced from sugarcane and sugar beets

Historical values show these products to have very low counts, and pathogenic organisms do not survive.

If you have any questions, please do not hesitate to contact us.

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Declaration of Wood Pallets

This is to certify that the pallets used in the shipment of ADM's Corn Processing Packaged Products are in compliance with ISPM-15 wood packaging materials standards. The storage environment and shipping containers are carefully monitored to ensure the pallets used for our products will be free of any insect infestation at the point of delivery. All pallets used for ADM's Corn Processing Packaged Products have been heat treated and have not been treated with any chemicals.

If you have any questions, please feel free to contact us.



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Packaging Information for CornSweet® Crystalline Fructose

The specifications of the 50 lb. and 25 kg poly lined bags are as follows:

Materials:

The bags are multi-layered consisting of a polyethylene liner, two natural Kraft paper layers, and one outer bleached Kraft paper sheet. The bag is a pinch-bottom design with a heat-sealed top.

The components used in this packaging product have the following U.S. FDA compliance:

White or Natural Kraft Paper 21 CFR 176.170 and/or 176.180 Polymer films 21 CFR 177.1520 (Olefin polymers)

Hot Melt Adhesives 21 CFR 175.105
Inks Functional Barrier*

Bags:

50 lb. Dimensions = 15" X 27.5" X 4" 25 kg Dimensions = 15" X 28" X 5"

Pallet Configuration:

50 lb. bags are stacked 9 layers high, 5 bags per layer (45/pallet).

25 kg bags are stacked 8 layers high, 5 bags per layer (40/pallet).

Pallets are wooden, 40" X 48" GMA standard, ISPM-15 compliant.

Both finished pallets are approximately 40" high, stretch-wrapped, with a bottom cardboard slip sheet and a plastic top sheet.

If you have any questions, please do not hesitate to contact us.

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^{*}Inks, varnishes and lacquers are separated from food contact by a functional barrier.



September 10, 2018

The FSMA Final Rule, Mitigation Strategies to Protect Food Against Intentional Adulteration, was published on May 27th, 2016, at 81 FR 34165. The rule has an effective date of July 26, 2016, and a compliance date for facilities, other than small and very small businesses of July 26, 2019. Facilities are required to perform vulnerability assessments to identify significant vulnerabilities, implement mitigation strategies to control those vulnerabilities and to create a written Food Defense Plan which details the vulnerability assessment, the mitigation strategies employed and HACCP-style program management components.

ADM has developed and applied a science-based food defense vulnerability assessment model of which the concepts used have been integrated into a DHS Chemical Security Analysis Center (CSAC) funded project at the Food Protection and Defense Institute (FPDI). The Intentional Adulteration Assessment Tool (IAAT) resulted from collaboration and is available for use by the U.S. Food & Agriculture Sector.

ADM also employs the FDA's Key Activity Type (KAT) assessment methodology and a hybrid-KAT methodology in which scientific rigor is employed to ensure that process steps which are not Actionable Process Steps (APS) are not controlled unnecessarily.

The majority of ADM facilities which are subject to the Rule have been assessed within the past year and those facilities have received a draft food defense plan which complies with the Rule's requirements. We anticipate full compliance by the due date.

Thank you,

Clint Fairow, M.S.

Global Food Defense Manager Email: clint.fairow@adm.com



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Proposition 65 Statement

The Safe Drinking Water and Toxic Enforcement Act of 1986 in Title 27 of the California Code of Regulations, commonly known as "Proposition 65", requires businesses to provide a "clear and reasonable" warning when they knowingly and intentionally cause an exposure to an OEHHA listed chemical, and prohibits the discharge of listed chemicals into sources of drinking water. Its purpose is to protect the state's drinking water sources and provide California residents assistance in making informed decisions regarding exposure to listed chemicals that cause cancer or reproductive effects in purchased products and at physical sites.

After review of the Corn Division products*, it is ADM's position that a Proposition 65 warning label is not required for the products we sell as none contain listed chemicals at levels above "no significant risk."

ADM Corn Division Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Alcohol-Beverage, Fuel and Industrial*	Monk Fruit (VerySweet™)
Allulose (JustSweet™)	Rice Syrup
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrups (CornSweet®)	

^{*}ADM ethanol is listed under California's Proposition 65 State Drinking Water and Toxic Enforcement Act as causing cancer or reproductive toxicity when associated with abuse. Methanol is found in ADM's non-denatured ethanol at less than 50 ppm. Methanol is also used as a denaturant in some of ADM's Specially Denatured Alcohol formulas and may be present in concentrations up to 15%. Acetaldehyde, found in trace amounts in ethanol, is also listed.



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Current Good Manufacturing Practices Statement

This is to certify that the products listed below are manufactured following Current Good Manufacturing Practices (cGMP) as defined in 21 CFR 117 for Human Food and 21 CFR 507 for Feed (Animal Food).

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)
Allulose (JustSweet™)	Rice Syrups
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrups (CornSweet®)	

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

Feed Products

CitriStim [®]	Distiller's Dried Grains with Solubles
Corn Germ Meal	Golden Gluten™
Corn Gluten Feed	Golden Synergy™
Corn Gluten Meal	Liquid Gold™
Distiller's Corn Oil	Wet/Modified Wet Distiller's Grains

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The information contained herein is correct as of the date of this document to the best of our knowledge. Any recommendations or suggestions are made without guarantee or representation as to results and are subject to change without notice. We suggest you evaluate any recommendations and suggestions independently. WE DISCLAIM ANY AND ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. Our responsibility for claims arising from any claim for breach of warranty, negligence, or otherwise shall not include consequential, special, or incidental damages, and is limited to the purchase price of material purchased from us. None of the statements made here shall be construed as a grant, either express or implied, of any license under any patent held by Archer Daniels Midland Company ingredients.

^{*}Sourced from sugarcane and sugar beets



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Letter of Guarantee

ADM hereby warrants and guarantees that all of the following products sold to you have been approved by the U.S. Food and Drug Administration for their use in foods or are Generally Recognized as Safe (GRAS), or exempt from the provisions of the 1958 Additives Amendment to the Food, Drug and Cosmetic Act, and are allowed for sale in Canada.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)
Allulose (JustSweet™)	Rice Syrups
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrups (CornSweet®)	

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

We further guarantee that none of the foregoing products comprising any shipment or other delivery now in transit or hereafter made to you as is, as of the date of such shipment or delivery, has been adulterated or misbranded within the meaning of the Federal Foods, Drug and Cosmetic Act or any practically similar state or municipal law, or is an article which may not, under Section 404 or 505 of said Act, be introduced into Interstate Commerce. All of the foregoing is a continuing guarantee, subject to revocation upon written notice.

^{*}Sourced from sugarcane and sugar beets



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Country of Origin Statement

The products listed below are manufactured within the boundaries of the United States of America, and are never outside its boundaries prior to shipment. The corn used as the raw material was sourced in the U.S.A.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Crystalline Dextrose-Dry and Agglomerated (Clintose®)*
Alcohol-Beverage, Fuel and Industrial	Fructose-Crystalline and Liquid (CornSweet®)*
Allulose (JustSweet™)	High Fructose Corn Syrups (CornSweet®)*
Corn Starch-Food, Industrial and Moulding*	Maltodextrin-Dry and Agglomerated (Clintose®)
Corn Syrup-Liquid and Solids	Corn Sweetener Blends

^{*}Some Non-GM varieties excluded

Feed Grade Products

CitriStim [®]	Distiller's Dried Grains with Solubles
Corn Germ Meal	Golden Gluten™
Corn Gluten Feed	Golden Synergy™
Corn Gluten Meal	Liquid Gold™
Distiller's Corn Oil	Modified Wet Distiller's Grains



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Genetically Modified Organisms (GMO) Statement

Archer Daniels Midland Company (ADM) contracts to procure its raw material corn from only European Union (EU) approved varieties. Due to our large scale of operations, non-GM and GM corn cannot be segregated from one another. Consequently, ADM's products may or may not be produced from GM corn. The list of products can be seen at the end of this document.

Industry consensus is that GM DNA, or protein, in the raw material stream is denatured, degraded, or removed through refining by successive processing which includes physical separation, heating, purification, and filtration. As a result, GM DNA, or protein, cannot be detected in measurable amounts in highly refined products.

While GM DNA or protein is not expected, ADM does periodically test for its presence. Previous samples tested for GM DNA were reported non-detect down to 0.1% by a third party. Our experience of the manufacturing process and historic non-detectable test results by PCR (Polymerase Chain Reaction), we can ascertain that our products are PCR negative for quantifiable value of GM DNA.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Fructose-Crystalline and Liquid (CornSweet®)
Alcohol-Beverage, Fuel and Industrial Grade	High Fructose Corn Syrups (CornSweet®)
Allulose (JustSweet™)	Maltodextrin-Dry and Agglomerated (Clintose®)
Corn Syrup-Liquid and Solids	Sweetener Blends
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	



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Pesticides Statement

ADM's Corn Business unit employs an ongoing pesticide monitoring program to ensure there are no detectable pesticide residues found in our finished products as listed below.

For products where corn is the primary raw material, corn is sourced through regional grain distribution systems, regulated by the USDA. The EPA regulates the types of pesticides that may be employed on corn, and has published a list of approved pesticides. Corn that is purchased on the open market may or may not have been treated with these approved materials. ADM does not apply any pesticides on the corn that we process.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	High Fructose Corn Syrups (CornSweet®)
Alcohol-Beverage, Fuel and Industrial	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Allulose (JustSweet™)	Monk Fruit (VerySweet™)
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

Feed Products

CitriStim®	Distiller's Dried Grains with Solubles
Corn Germ Meal	Golden Gluten™
Corn Gluten Feed	Golden Synergy™
Corn Gluten Meal	Liquid Gold™
Distiller's Corn Oil	Wet/Modified Wet Distiller's Grains

^{*}Sourced from sugarcane and sugar beets



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Mycotoxin Statement

Concerns regarding mycotoxins in the final food products manufactured within the Carbohydrate Solutions Business Unit are mitigated by the corn wet milling process. Published historical studies have determined that the wet milling process prevents mycotoxins, such as aflatoxins, fumonisins, ochratoxin, deoxynivalenol, and zearalenone from carrying through to the final product. These products have been tested with non-detectable results below 0.1ppb and include:

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca	
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)	
Allulose (JustSweet™)	Rice Syrups	
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)	
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)	
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert	
Erythritol	Sweetener Blends	
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native	
High Fructose Corn Syrups (CornSweet®)		

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

ADM has extensive quality control parameters in place to quantify the risk associated with procured corn utilized as the raw material. This program includes continual monitoring throughout the year in addition to increased testing during the initial onset of harvest. This supplemental program further mitigates the risk associated with mycotoxins in the Carbohydrate Solutions final food products.

Please contact us with questions.

ADM Technical Services

^{*}Sourced from sugarcane and sugar beets



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Pest Control Statement

Archer Daniels Midland Company (ADM) pest control services are performed under Integrated Pest Management (IPM) principles. Each ADM food processing location has developed a system to track and trend pest activities. There is a mechanism in place at all manufacturing locations to ensure that recommendations from the pest control providers are reviewed and corrective actions are completed to ensure continuous improvement of the Quality Management System.

Please do not hesitate to contact us if you have any questions.



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Preservative Statement

ADM does not add any preservatives, bleaching agents, artificial flavors, pigments or dyes including sodium benzoate and benzoic acid to any of the following products:

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®)* and Tapioca	
Alcohol-Beverage, Fuel and Industrial*	Monk Fruit (VerySweet™)	
Allulose (JustSweet™)*	Rice Syrups	
Corn Starch-Food, Industrial and Moulding*	Stevia (SweetRight™)	
Corn Syrup-Liquid and Solids*	Sucralose (VivaSweet™)§	
Crystalline Dextrose-Dry and Agglomerated (Clintose®)*	Sucrose+-Dry, Liquid and Invert	
Erythritol	Sweetener Blends*	
Fructose-Crystalline and Liquid (CornSweet®)*	Tapioca Starch-Modified and Native	
High Fructose Corn Syrups (CornSweet®)*		

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com. †Sourced from sugarcane and sugar beets

Sulfiting agents are used as a processing aid early in the corn wet milling process (products identified by *), but through the various refining steps, the amount of sulfites in the finished product is reduced. The sulfite limits for the above products are listed on their respective technical documents located in the allergen section. No sulfiting agents are used in the sugar refining process.



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Gluten Free Statement

The FDA defines "gluten" as the protein, or antigenic fraction proteins, present in wheat, barley, rye, or related grain species or cross-bred varieties or derivatives thereof to which some people are intolerant or allergic.

The ADM products listed in the table below are not included in this FDA definition. These products are produced from corn, soybeans, sucrose or other plants that do not contain the soluble proteins that have the gliadin protein responsible for celiac sprue disease. Therefore, these ADM products are considered to be gluten free and do not contain ingredients or by-products derived from wheat, barley, rye or other related grain species, cross-bred varieties and derivatives.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)
Allulose (JustSweet™)	Rice Syrups
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrups (CornSweet®)	

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

^{*}Sourced from sugarcane and sugar beets



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Irradiation and Radioactive Contamination

All ADM approved food-grade and feed-grade manufacturing facilities have documented Food Safety Plans that are compliant with the Final Rule for the Hazard Analysis and Risk-Based Preventive Controls for Human and Animal Food. Each Food Safety Plan's associated Risk Assessment takes into consideration the possibility of radioactive contamination and irradiation. No radiological or irradiation risks have been identified by the Food Safety Teams.

The ADM products listed below have not been irradiated and are free of radioactive contamination.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)
Allulose (JustSweet™)	Rice Syrups
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrups (CornSweet®)	

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

^{*}Sourced from sugarcane and sugar beets

Feed Products	
CitriStim [®]	Distiller's Dried Grains with Solubles
Corn Germ Meal	Golden Gluten™
Corn Gluten Feed	Golden Synergy™
Corn Gluten Meal	Liquid Gold™
Distiller's Corn Oil	Wet/Modified Wet Distiller's Grains

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BSE (Bovine Spongiform Encephalopathy) and TSE (Transmissible Spongiform Encephalopathy) Statements

Archer Daniels Midland Company (ADM) manufactures the products listed below. These products do not contain and are not processed with any animal products, by-products, or animal-derived products.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca	
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)	
Allulose (JustSweet™)	Rice Syrups	
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)	
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)	
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert	
Erythritol	Sweetener Blends	
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native	
High Fructose Corn Syrups (CornSweet®)		

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

Feed Products

Citristim [®]	Distiller's Dried Grains with Solubles	
Corn Germ Meal	Golden Gluten™	
Corn Gluten Feed	Golden Synergy™	
Corn Gluten Meal	Liquid Gold™	
Distiller's Corn Oil	Wet/Modified Wet Distiller's Grains	
Distiller's corn on	Wed Modified Wet Distinct 5 Grains	

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^{*}Sourced from sugarcane and sugar beets



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Residual Solvents Statement

This statement certifies that, based on our knowledge of the manufacturing process and our storage, shipping and handling procedures, the products listed below comply with the established standard for Residual Solvents as set forth in the current USP.

Sweeteners and Food Additives

No Class 1, 2, 3, or non-ICH solvents are used in the manufacture of these products. Due to possible organic acid and other carbohydrate reactions that naturally occur in sugars, only Class 3 or non-ICH solvents may be present below 0.1%.

Acidulants-Citric Acid, Potassium and Sodium Citrate	High Fructose Corn Syrups (CornSweet®)	
Allulose (JustSweet™)	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca	
Corn Starch-Food, Industrial and Moulding	Rice Syrups	
Corn Syrup-Liquid and Solids	Sucrose*-Dry, Liquid and Invert	
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sweetener Blends	
Erythritol	Tapioca Starch-Modified and Native	
Fructose-Crystalline and Liquid (CornSweet®)		
Some products available in GM and Non GM varieties. Contact <u>SweetenerInsideSales@adm.com</u> .		
*Sourced from sugarcane and sugar beets		

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Animal Testing Statement

Archer Daniels Midland Company's (ADM) food ingredients business occasionally works with animals to evaluate the nutritional value and safety of our ingredients intended for consumption. This work is intended to help ADM meet standards set by regulatory authorities. ADM works closely with universities and/or contractors whose work is carefully evaluated by review boards that ensure the animal trials are safe, humane and ethically designed and conducted. ADM does not conduct animal testing on these products listed in the table below for cosmetic purposes and/or for use in household cleaning agents. Furthermore, ADM does not test products on animals' skin or eyes to determine safety. ADM would have no knowledge of animal testing performed on these products after they are sold into commercial or government markets.

Food and Industrial Grade Products

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Acidulants-Citric Acid, Potassium and Sodium Citrate	Monk Fruit (VerySweet™)
Alcohol-Beverage, Fuel and Industrial	Rice Syrups
Allulose (JustSweet™)	Stevia (SweetRight™)
Corn Starch-Food, Industrial and Moulding	Sucralose (VivaSweet™)
Corn Syrup-Liquid and Solids	Sucrose*-Dry, Liquid and Invert
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sweetener Blends
Erythritol	Tapioca Starch-Modified and Native
Fructose-Crystalline and Liquid (CornSweet®)	
High Fructose Corn Syrups (CornSweet®)	
Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca	
Some products available in GM and Non GM varieties. Contact <u>Swe</u>	etenerInsideSales@adm.com.
*Sourced from sugarcane and sugar beets	

Feed Products

CitriStim®	Distiller's Dried Grains with Solubles
Corn Germ Meal	Golden Gluten™
Corn Gluten Feed	Golden Synergy™
Corn Gluten Meal	Liquid Gold™
Distiller's Corn Oil	Wet/Modified Wet Distiller's Grains

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Vegan/Vegetarian Statement

ADM has reviewed four Vegetarian diets: Ovo-Vegetarian, Lacto Vegetarian, Lacto-Ovo Vegetarian and Vegan. These categories will be outlined below:

Ovo-Vegetarian

Ovo Vegetarian does not eat dairy products, meat, poultry or fish/seafood of any kind, but does consume eggs.

Lacto Vegetarian

Lacto Vegetarian does not eat eggs, meat, poultry or fish/seafood of any kind, but does consume dairy products.

Lacto-Ovo Vegetarian

Lacto-Ovo Vegetarian does not eat meat, poultry or fish/seafood of any kind, but does consume eggs and dairy products.

Vegan

Vegan does not eat meat, poultry, fish/seafood, eggs or dairy products of any kind. A Vegan also refrains from honey.

Food and Industrial Grade Products

Acidulants-Citric Acid, Potassium and Sodium Citrate	Maltodextrin-Dry and Agglomerated (Clintose®) and Tapioca
Alcohol-Beverage, Fuel and Industrial	Monk Fruit (VerySweet™)
Allulose (JustSweet™)	Rice Syrups
Corn Starch-Food, Industrial and Moulding	Stevia (SweetRight™)
Corn Syrup-Liquid and Solids	Sucralose (VivaSweet™)
Crystalline Dextrose-Dry and Agglomerated (Clintose®)	Sucrose*-Dry, Liquid and Invert
Erythritol	Sweetener Blends
Fructose-Crystalline and Liquid (CornSweet®)	Tapioca Starch-Modified and Native
High Fructose Corn Syrups (CornSweet®)	

Some products available in GM and Non GM varieties. Contact SweetenerInsideSales@adm.com.

Based on the descriptions above, the ADM products in the table below would be suitable for these diets.

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^{*}Sucrose and invert can be sourced from raw cane sugar and sugar beets. The cane sugar refining process utilizes bone char as a filtration media to remove color and other impurities. Bone char is only used as a processing aid. A final filtration is used to separate and remove the processing aids from the final sugar product.



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Recall & Traceability Statement

ADM Corn Processing tests internal traceability once per year on each product line at every production facility. These exercises are designed to test both internal traceability and the recall/withdrawal programs. The standards followed for each exercise requires at least 99.5% recovery for both internal tracing and recall/withdrawal programs. The exercise goal is to complete traceability of affected finished product within four hours. Times will vary slightly depending upon the given scenario.

If you have any questions, please do not hesitate to contact us.

ADM Technical Services



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24-Hour Contact List - Technical Services and Quality

Technical Services Business Hours: Monday – Friday 8:00 a.m. to 4:30 p.m. (Central Time). For afterhours calls, please contact via cell phone number provided below.

Name	Title	Area of Responsibility	Email	Work Phone	Cell Phone
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Matt Guymon	Technical Service Representative	Starches, Crystalline Fructose Citric & Citrates,	matt.guymon@adm.com	217.451.7609	217.412.7039
Lance Forster	Manager, Nutrition Services	Corn Co-Products (Feed)	lance.forster@adm.com	217.451.4983	217.358.1756
Doris Dougherty	Technical Service Representative	Fibersol	doris.dougherty@adm.com	217.451.7643	217.358.7763
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