



MALTRIN[®] M250

Corn Syrup Solids

DESCRIPTION

MALTRIN[®] corn syrup solids are bland, minimally sweet white carbohydrate powders produced from corn of U.S. origin. They are products with varying length polymer profiles that provide a wide range of viscosity and solubility characteristics.

REGULATORY

MALTRIN[®] corn syrup solids are generally recognized as safe (GRAS) as direct food ingredients at levels consistent with good manufacturing practices (21 CFR 184.1865). The correct labeling is “corn syrup solids”, but all label declarations should be reviewed with appropriate legal counsel.

PACKAGING, STORAGE AND SHELF LIFE

- Packaged in: 50-pound net, multiwall paper bags that are individually shrink wrapped; 2,000-pound tote bags; 25-kilogram bags.
- Store under ambient conditions; protect from excessive heat and excessive humidity for extended periods of time.
- Under good storage conditions the shelf life should be a minimum of two years.
- MALTRIN[®] corn syrup solids will remain stable, but may pick up moisture if stored in excessive humidity, so reevaluation for moisture is recommended after one year to confirm the product still meets desired specifications.

PRODUCT ATTRIBUTES

- Heated solutions at 60% solids remain clear
- Minimal contribution to viscosity at solids below 50%
- Easily dispersible
- Moderate sweetness

APPLICATIONS

- Source of energy for nutritional products
- Moderates sweetness and browning in meat products
- Prevents sugar crystallization in confections, frostings and glazes

LOT CODES

Lot codes can be interpreted as follows: The first alpha character represents the product, followed by the last two numbers of the year and then the Julian date. Numbers following the Julian date represent the product line and the lot of the day.

Example: M1310801: M = MALTRIN[®]; 13 = 2013; 108 = Apr. 18; 01 = first lot

Technical Information

MALTRIN® M250

Corn Syrup Solids

TYPICAL NUTRITIONAL INFORMATION

Values per 100 grams of product

Calories	378
Calories from Fat	0 g
Total Fat	0 g
Saturated Fat	0 g
Trans Fat	0 g
Monounsaturated Fat	0 g
Polyunsaturated Fat	0 g
Protein	0 g
Total Carbohydrate	94.5 g
Sugars	15 g
Dietary Fiber	0 g
Soluble Fiber	0 g
Insoluble Fiber	0 g
Sugar Alcohols	0 g
Other Carbohydrates	79.5 g
Calcium	16 mg
Iron	0 mg
Sodium	70 mg
Magnesium	6 mg
Potassium	5 mg
Phosphorus	12 mg

Mandatory Nutrition Facts listed in bold

The above information is considered to be typical and not part of the product specification. Each value represents the average analyses performed using samples from several product lots. All nutrient data is reported for 100 grams of "as is" product, assuming 5 percent moisture and 94.5 grams of carbohydrate.

NOT a significant source of Vitamin A, Vitamin C, Vitamin D, Vitamin E, Vitamin K, Thiamin, Riboflavin, Niacin, Vitamin B6, Folate, Vitamin B12, Panthothenic Acid, Biotin, or minerals Chromium, Copper, Iodine, Manganese, Molybdenum, Selenium, Zinc.

STANDARD SPECIFICATIONS*

• Dextrose Equivalent	23.0-27.0
• Moisture, %	6.0 max.
• Ash (sulfated), %	0.5 max.
• pH (20% solution)	4.4-5.6
• Bulk Density (packed), lb/cu ft	35.0-45.0
• Aerobic Plate Count, CFU/g	100 max.
• Yeast/Mold, CFU/g	100 max.
• <u>E. coli</u>	Negative/10 g
• Salmonella	Negative/25 g

* Any specification different from or not listed above must be agreed upon between the customer and Grain Processing during specification approval.

CARBOHYDRATE LABELING INFORMATION**

• DP1 (glucose) per 100 grams	7
• DP2 (maltose) per 100 grams	8

** Carbohydrate information reported "as is".

DEGREE OF POLYMERIZATION (DP PROFILE)***

• DP1-7, %	60
• DP8-25, %	35
• DP26-40, %	0
• Greater than DP40, %	5

*** All DP profile data reported "as is".

MALTRIN® and MALTRIN QD® are registered trademarks of Grain Processing Corporation.

The information presented in this document is believed to be correct. Any recommendations or suggestions are made without guarantee or representation as to results for any particular usage. You are responsible for determining that the use of any GPC product, as well as your product and its use, and any claims made about your product, all comply with applicable laws and regulations for your particular jurisdiction. The information contained in this document is offered solely for your independent investigation, verification and consideration.

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Grain Processing Corporation

1600 Oregon Street | Muscatine, Iowa 52761 USA

p: 563.264.4265 | f: 563.264.4289

e: food.sales@grainprocessing.com | grainprocessing.com

M250 TI 011314



SAFETY DATA SHEET

1. Identification

Product identifier MALTRIN® M200, M200 NF, M250
Other means of identification Not available.
Recommended use Not available.
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information
Manufacturer

Company name Grain Processing Corporation
Address P.O. Box 349
1600 Oregon Street
Muscatine, Iowa 52761 USA

Telephone For Other Information, call: (563) 264-4265 (M-F 8am-5pm)
24-hour Assistance: (563) 264-4304

Website www.grainprocessing.com
E-mail Not available.
Emergency phone number 24-hour CHEMTREC US 1-800-424-9300
24-hour CHEMTREC 1-703-527-3887
International

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.
Hazard statement The substance does not meet the criteria for classification.
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) Warning! Product becomes a combustible dust when finely divided and suspended in air. Keep away from sources of ignition, sparks, and open flames. Use only in well-ventilated areas. Provide adequate dust control.

Supplemental information Not applicable.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Corn Syrup Solids		68131-37-3	~95

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments Product is GRAS for human consumption 21 CFR 168.121.

4. First-aid measures

Inhalation If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.

Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion No adverse effects due to ingestion are expected.

Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	If you feel unwell, seek medical advice (show the label where possible).
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). Use water spray to prevent dust-air mixtures.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions	In the event of fire, cool tanks with water spray.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
General fire hazards	Product becomes a combustible dust when finely divided and suspended in air. Keep away from sources of ignition, sparks, and open flames. Use only in well-ventilated areas. Provide adequate dust control.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	This product is miscible in water. Minimize dust generation and accumulation. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter. For waste disposal, see section 13 of the SDS. Following product recovery, flush area with water.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Practice good housekeeping.
Conditions for safe storage, including any incompatibilities	Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Guard against dust accumulation of this material.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Use tight fitting goggles if dust is generated.
Hand protection	Not normally needed.
Other	Wear suitable protective clothing.
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
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.

9. Physical and chemical properties

Appearance	Powder.
Physical state	Solid.
Form	Powder.

Color	White.
Odor	Mild.
Odor threshold	Not available.
pH	4.0-5.60
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)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	Dust explosion properties for M100 Pm (bar) 8.7 dP/dT(bar/s) 822 Kst(bar.m/s) 223 M.I.E.(Cloud)(mJ) 300-500 M.I.T. (Cloud)(C) 390-400 M.E.C. (g/m3) 110-130 Dust explosion properties for M040 Pm (bar) 7.7 dP/dt(bar/s) 458 Kst(bar.m/s) 124 M.I.E.(cCloud)(mJ) 500-1000 M.I.T.(Cloud)(C) 420-430 M.E.C.(g/m3) 160-180 Dust explosion properties for M500 Pm(bar) 8.9 dP/dt(bar/s) 752 Kst(bar.m/s) 204 M.I.E. (Cloud)(mJ) 500-1000 M.I.T.(Cloud)(C) 410-420 M.E.C.(g/m3) 140-160
Moisture	~5%

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Inhalation of dusts may cause respiratory irritation.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Dust in the eyes will cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity	Not available.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not available.

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	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport 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	Not applicable.

15. Regulatory information

US federal regulations

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
No

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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

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

Issue date 10-06-2014

Version # 01

Further information 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.

HMIS® is a registered trade and service mark of the American Coatings Association

HMIS® ratings

Health: 0
Flammability: 0
Physical hazard: 0
Personal protection: E

NFPA ratings

Health: 0
Flammability: 0
Instability: 0

References

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. The information in the sheet was written based on the best knowledge and experience currently available.

Grain Processing Corporation

1600 Oregon Street, Muscatine, Iowa 52761-1494 USA

Phone: 563-264-4265 ♦ Fax: 563-264-4289

August 17, 2010

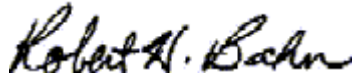
To Whom It May Concern:

The country of origin for MALTRIN® maltodextrins and corn syrup solids and food/pharmaceutical starches is the USA. All raw material used in processing is also of USA origin.

If you have any questions regarding this information, please contact me at 563-264-4281, fax 563-264-4289 or via e-mail bahnbob@grainprocessing.com.

Sincerely,

GRAIN PROCESSING CORPORATION



Robert H. Bahn

Marketing Administrator

Food/Pharmaceutical/Personal Care

Grain Processing Corporation
1600 Oregon Street, Muscatine, Iowa 52761-1494 USA
Phone: 563-264-4265 ♦ Fax: 563-264-4289



501 Chesapeake Park Plaza
Baltimore MD 21220
410-574-4500 Fax: 410-391-6665

October 28, 2009

To Whom It May Concern:

Regarding Diacetyl, it is not used in MALTRIN® maltodextrins and corn syrup solids and food/pharmaceutical starches or stored in our plant.

If you have any questions regarding this information, please contact me.

Sincerely,

GRAIN PROCESSING CORPORATION

A handwritten signature in black ink that reads "Robert H. Bahn".

Robert H. Bahn
Marketing Administrator
Food/Pharmaceutical/Personal Care
Tel: (563) 264-4281
Fax: (563) 264-4289
bahnbob@grainprocessing.com



Grain Processing Corporation

1600 Oregon Street • Muscatine, Iowa 52761-1494 USA
Phone: 563-264-4265 • Fax: 563-264-4289

February 17, 2004

To Whom It May Concern:

I am writing to you in regards to your letter concerning the Bioterrorism Act of 2002. Grain Processing Corporation has registered with the FDA and does have its registration number. We are in compliance with all parts of the act, including the Interim Final Rule Prior Notice of Imported Food Shipments. We have also sent letters to our suppliers, notifying them of the Act and their obligations to register.

If you have any further questions concerning this or other quality issues, please feel free to contact me. My phone number is 563-264-4847 and my email address is casey_hilton@grainprocessing.com.

Sincerely,

Carla (Casey) Hilton
QA Manager
Grain Processing Corporation



Chemical Co. Inc.

501 Chesapeake Park Plaza

Baltimore MD 21220

410-547-4500 Fax: 410-391-6665



GRAIN PROCESSING CORPORATION Muscatine, Iowa 52761 Washington, Indiana 47501	QUALITY DEPARTMENT FORM HACCP DESCRIPTION CHART	Form No. 44-HCP-03
Form Effective: <u>08-20-07</u> Form Revised/Reviewed: 08-06-07 <u>DLD</u> Form Supersedes: <u>07-17-06</u>	Prepared by: <u>SLA 01-02-04</u> Approved by: <u>CRH</u> Approval Authorization: 44-01-00-02	Revision <u>2</u> Page 1 of 1

PROCESS: Maltrin

LOCATION: Muscatine, IA

DATE: Dec. 16, 2009

REVIEWED BY: HACCP Team

QA APPROVED:

DATE:

CCP	WHAT	CRITICAL LIMITS	HOW	MONITORING			CORRECTIVE ACTION	VERIFICATION	RECORDS
				FREQUENCY	WHO				
1. Vibratory Screeners	Condition of screens	No breaks or tears	Visually monitored	Per SOP#s 31-04-06-07 31-05-01-04 31-05-02-04 31-05-03-02	Loading Coordinator/ Prod. Crew Leader/Evap Operator		Product isolated from last good check	Maltrin Dept. Supt./Warehouse Supt. Per SOP#s 31-04-06-07 31-05-01-04 31-05-02-04 31-05-03-02	Dept Supt.'s office
2. Metal Detectors	Checks for metal	No Metal detected	Test cards sent through detector	Per SOP#s 31-04-06-06 31-05-01-11 31-05-02-11 31-05-03-06	Loading Coordinator/ Prod. Crew Leader/Evap Operator		Product isolated from last good check	Maltrin Dept Supt./Warehouse Supt Per SOP#s 31-04-06-06 31-05-01-11 31-05-02-11 31-05-03-06	Dept Supt.'s office
3. Finished Product Micro	Required Micro tests	Must meet Specifications as defined in LIMS	Micro Lab Analysis	Every lot	Microbiology Lab Technicians		Per SOP# 44-08-02-04 44-08-03-01	A.S. Microbiologist and QA Coordinator	LIMS and Micro work sheets

Maltrin® (Maltodextrin and Corn Syrup Solids) are each mixtures of glucose polymers produced by the controlled depolymerization of corn starch. They are categorized most by dextrose equivalence (DE). Maltrin is used in many liquid and dried nutritional products as well as an excipient for the pharmaceutical industry.



Grain Processing Corporation
1600 Oregon Street
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Carla R. Hilton
Quality Assurance Manager



Chemical Co. Inc.

501 Chesapeake Park Plaza
Baltimore MD 21220
410-547-4500 Fax: 410-391-6665



November 12, 2008

To Whom It May Concern:

All written policies, procedures, and documents are written in ISO format. Although we have not chosen to pursue ISO certification at this time, we continue to review and update our system to use ISO standards where appropriate. Our Quality system is designed and verified to meet current Good Manufacturing Practices (cGMPs). We have a detailed Quality Manual and each department has a complete Standard Operating Procedure (SOP) manual. The Quality Control laboratory is certified by the Bureau of Alcohol, Tobacco, and Firearms (BATF) and is state certified as a Biochemical Oxygen Demand (BOD)/Environmental lab. We conduct internal audits of the QC laboratory and production areas yearly. We have had a third party (GMA-Safe audit) conducted for the Alcohol department. If interested in this, please contact your sales representative for more details.

If you have any other questions or problems concerning this matter, please feel free to contact me by phone at (563) 264-4847 or e-mail me at casey_hilton@grainprocessing.com.

Sincerely,

Carla (Casey) Hilton
Quality Assurance Manager
Grain Processing Corporation



1600 Oregon Street, Muscatine, IA 52761, USA
grainprocessing.com

January 3, 2011

To Our Valued Customer:

RE: BSE

Regarding your concern of bovine spongiform encephalopathy (BSE) or mad cow disease, Grain Processing Corporation's MALTRIN[®] maltodextrins and corn syrup solids; PURE-DENT[®], PURE-COTE[®], INSTANT PURE-COTE[®], Spress[®], PURE-BIND[®], PURE-SET[®], PURE-GEL[®], INSCOSITY[®], and Zeina[®] food and pharmaceutical starches; and TruBran[®] corn bran do not contain any meat or meat by-products or dairy or dairy by-products. As confirmation, our products are produced from corn and are certified kosher and pareve via rabbinical supervision. For these reasons, we see no BSE concern.

If you have any questions regarding this information, please contact us at 563-264-4265.

Sincerely,

GRAIN PROCESSING CORPORATION

Robert H. Bahn
Marketing Administrator
Grain Processing Corporation
1600 Oregon Street
Muscatine, IA 52761
bahnbob@grainprocessing.com
Work: (563)264-4281
Mobile: (563)260-6397

GRAIN PROCESSING CORPORATION Muscatine, Iowa 52761 Washington, Indiana 47501	QUALITY DEPARTMENT FORM HACCP FLOW DIAGRAM	Form No. 44-HCP-02
Form Effective: <u>08-20-07</u> Form Revised/Reviewed: <u>08-06-07 DLD</u> Form Supersedes: <u>08-30-06</u>	Prepared by: <u>SLA 01-02-04</u> Approved by: <u>CRH</u> Approval Authorization: 44-01-00-02	Revision <u>3</u> Page 1 of 1

PROCESS: Maltrin

LOCATION: Muscatine, IA

DATE: Dec. 16, 2009

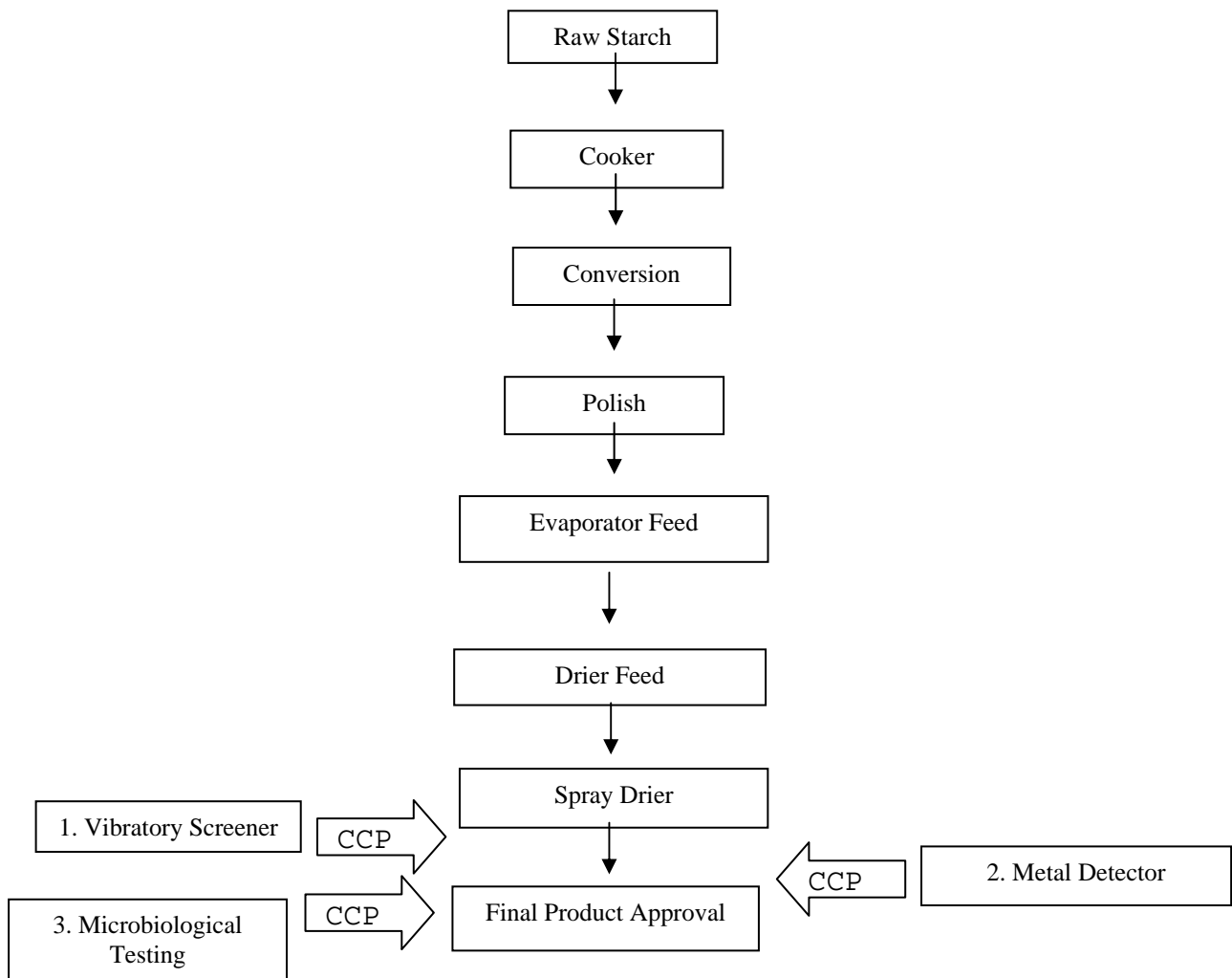
REVIEWED BY: HACCP Team

QA APPROVED:

DATE:

Hazard Analysis Critical Control Points (HACCP) Program

**Flow Diagram
MALTRIN**



Maltrin® (Maltodextrin and Corn Syrup Solids) are each mixtures of glucose polymers produced by the controlled depolymerization of corn starch. They are categorized most by dextrose equivalence (DE). Maltrin is used in many liquid and dried nutritional products as well as an excipient for the pharmaceutical industry.

Grain Processing Corporation
1600 Oregon Street, Muscatine, Iowa 52761-1494 USA
Phone: 563-264-4265 ♦ Fax: 563-264-4289

February 22, 2011

To Whom It May Concern:

MALTRIN® maltodextrins are generally recognized as safe (GRAS) as direct human food ingredients at levels consistent with current good manufacturing practices (21 CFR 184.1444). MALTRIN® maltodextrins are food grade and meet FCC monograph.

If you have any questions regarding this statement, please contact me at 563-264-4281, fax 563-264-4289 or via e-mail bahnbob@grainprocessing.com.

Sincerely,

GRAIN PROCESSING CORPORATION



Robert H. Bahn
Marketing Administrator
Food/Pharmaceutical/Personal Care

Grain Processing Corporation

1600 Oregon Street, Muscatine, Iowa 52761-1494 USA

Phone: 563-264-4265 ♦ Fax: 563-264-4289

December 8, 2010

To Whom It May Concern:

MALTRIN® maltodextrins and corn syrup solids and food/pharmaceutical starches have not been irradiated or treated with ethylene oxide at any point of the production process.

If you have any questions regarding this information, please contact me at 563-264-4281, fax 563-264-4289 or via e-mail bahnbob@grainprocessing.com.

Sincerely,

GRAIN PROCESSING CORPORATION



Robert H. Bahn

Marketing Administrator

Food/Pharmaceutical/Personal Care



1600 Oregon Street, Muscatine, IA 52761, USA
grainprocessing.com

April 23, 2013

To Whom It May Concern:

This letter is to state that Grain Processing Corporation is a processor of Yellow Dent Corn to make the following products: Maltodextrins & Corn Syrup Solids, Industrial & Food Grade Starch, Industrial & Beverage Alcohol, Feed Recovery Products and a variety of other value added products.

In the production of our pure Alcohol, GPC does not knowingly add or create any phthalates. This is based on knowledge of the manufacturing process and controlled handling, shipping, and storage of the material and not on actual test data.

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

Sincerely,

Carla (Casey) Hilton
Director, QA and Compliance
Grain Processing Corporation
E-mail: casey_hilton@grainprocessing.com

Grain Processing Corporation
1600 Oregon Street, Muscatine, Iowa 52761-1494 USA
Phone: 563-264-4265 ♦ Fax: 563-264-4289

March 18, 2011

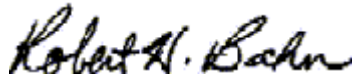
To Whom It May Concern:

Regarding MALTRIN® maltodextrin and corn syrup solids and food/pharmaceutical starches, these products are Proposition 65 compliant.

If you have any questions regarding this information, please contact me at 563-264-4281, fax 563-264-4289 or via e-mail bahnbob@grainprocessing.com.

Sincerely,

GRAIN PROCESSING CORPORATION



Robert H. Bahn
Marketing Administrator
Food/Pharmaceutical/Personal Care



Grain Processing Corporation
1600 Oregon Street • Muscatine, Iowa 52761-1494 USA
Phone: 563-264-4265 • Fax: 563-264-4289

Customer Questionnaire Response for Maltrin®

Grain Processing Corporation Overview for Customer Review

GPC
1600 Oregon St.
Muscatine, Iowa
52761

GPC
1443 S. 300 W.
Washington, Indiana
47501

Corporate Phone Number: 563-264-4847
Website: www.grainprocessing.com

Customer Questionnaire Response for Maltrin®

Section 1: General Information

Section 2: Quality

Section 3: Manufacturing

Section 4: Product Lot Identification and Traceability

Section 5: Pest Control

Section 6: Security

Section 1--General Information

1. Ownership/history of Grain Process Corporation GPC

Grain Processing Corporation (GPC) is a privately owned company. It is a subsidiary of Muscatine Foods Corporation and was established in 1943. It is a corn processing company that makes value-added, environmentally friendly products from renewable resources. The second facility at Washington, IN was built in 1999. The corporate headquarters are located in Muscatine, IA.

2. Property

GPC Muscatine is located on approximately 160 acres in an urban setting at Muscatine, IA. GPC Washington is located on approximately 125 acres in a rural setting at Washington, IN. Both production areas are constructed with concrete floors and walls, all of which are painted or sealed. The exterior area around buildings is paved or gravel and is well maintained.

3. Products Produced

GPC produces the following products: Maltodextrins & Corn Syrup Solids, Industrial & Food Grade Starch, Industrial & Beverage Alcohol, Feed Recovery Products and a variety of other value added products.

4. Registrations or Certifications

- A. FDA #1910695
- B. FDA Bioterrorism Act of 2002
- C. Maltrin® and Corn Syrup Solids Drug Master File #7437
- D. Federal Employer ID # 42-1321075
- E. Standard Industrial Code 2000 (Covering Manufacturing of Food Products)
- F. TTB Certified Quality Control Laboratory
- G. State Certified Biochemical Oxygen Demand (BOD)/Environmental Laboratory

5. FDA Visits

The last time Maltrin was inspected by the FDA at GPC Muscatine was May 20, 2009. No 483s were issued. The FDA has not been to GPC Washington at this time.

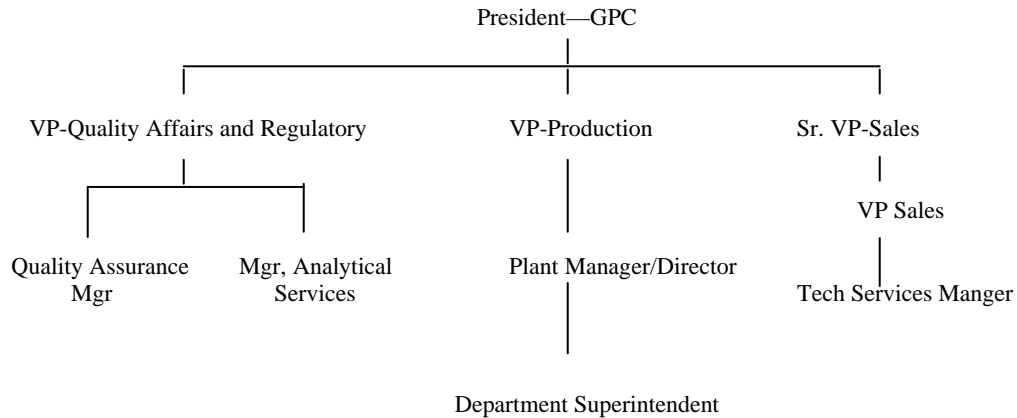
6. Contacts

Technical Service Manager	Angie Eads
Sales Administrator	Tracey Reynolds
GPC Muscatine Production Superintendent	Kevin Lester

GPC Washington Production Superintendent	Jason Fry
GPC Muscatine Analytical Services Manager	Cindy Sparks
GPC Washington Quality Control Manager	Melea Kluemper
GPC Muscatine Quality Assurance Coordinator – Maltrin®	Deb Doehrmann
GPC Washington Quality Assurance Coordinator – Maltrin®	Elizabeth Reed
Quality Assurance Manager	Carla (Casey) Hilton
Environmental Monitoring	Mick Durham

7. Reporting structure

General Organization Chart showing division of Quality, Production, and Sales/Tech Service at GRAIN PROCESSING CORPORATION



8. Work Force

GPC I has a union hourly work force. They are represented by the United Food & Commercial Worker’s International Union of America, AFL-CIO/CIC, Local #86D. GPC II does not have a union work force. Both plants have two 12-hour shifts per day for 365 days per year.

Section 2--Quality

1. Total Quality Management

We have a Quality system designed and verified to meet Good Manufacturing Practices (GMPs). We have a Quality Manual, which is reviewed on a minimum of every five years. There is a Quality SOP manual that is reviewed on a minimum of every three years. In addition, each department has a complete Standard Operating Procedure (SOP) manual for their area. These manuals are available for viewing during a customer audit or visit. We also have training records available. We perform statistical analysis on a monthly basis. QA conducts monthly sanitation/housekeeping inspections and internal audits of the Analytical Services (QC) laboratory and production areas yearly. GPC has a third party audit done by FPA for our Maltrin®, Food and Pharmaceutical grade Starches, and Ethyl Alcohol

Divisions. To view results of a specific audit, please contact your sales representative.

2. ISO 9000 Certification

All written policies, procedures, and documents are written in ISO format. Although we have not chosen to pursue ISO certification at this time, we continue to review and update our system to use ISO standards where appropriate.

3. Records

- A. All quality testing records are kept for a minimum of five years.
- B. We have a Laboratory Information Management System (LIMS) which notifies production and Analytical Services (QC) of sampling and testing needs that are to be done for all in-process and final products. Production has immediate access to the LIMS information through a computer system that is located throughout the Plant and in the Analytical Services (QC) laboratory.
- C. The latest customer specification is kept in the LIMS with a hard copy kept on file with our sales department.

4. Audits & Sanitation Inspections.

- A. The Quality Assurance (QA) Inspectors do sanitation inspections on a monthly basis.
- B. Annual internal audits are done by QA for each Production area and the Analytical Services (QC) laboratory.
- C. Maltrin has a Food Processors Association (FPA) SAFE audit done a minimum of every 14 months. For details, please contract your sales representative.
- D. We have several customer audits and/or visits on a yearly basis.
- E. We audit suppliers of critical ingredients.

5. Laboratory

- A. Both GPC Muscatine and GPC Washington have their own laboratory facility on site. There is an intra-lab check program set up between the laboratories. They each have an AACC check program for their Feeds and Microbiology labs. Both laboratories are TTB (formerly BATF) certified.
- B. Laboratory calibrations are maintained in the LIMS. Methods are formally written and pass through a review committee. Existing methods are reviewed on a three-year basis. Methods may be derived from the Bacteriological Analytical Manual (BAM), Corn Refinery Association (CRA), Association of Official Analytical Chemists (AOAC), United States Pharmacopoeia (USP), American Association of Cereal Chemists (AACC), American Standards of Testing Methods (ASTM), or Corn Industries Research Foundation.

6. Finished product testing and retained samples

- A. Analytical and microbial testing is performed by the Analytical Methods (QC) laboratory on all finished product lots. A second technician verifies all final product test results. Retained samples for each Maltrin® lot are maintained for two years.
- B. Grain Processing Corporation will test for the indicated organisms in the individual monograph for all products produced and marketed under the Pharmacopeia. Due to the difficult task of determining all applications where our products may be used, our customers must communicate any relevant objectionable microorganisms required. Currently our products are tested for the following specific microorganisms *Escherichia coli*, *Salmonella*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and *Listeria monocytogenes*. In addition to the above-mentioned specific organisms, aerobic plate count (APC), Yeast, Mold, mesophilic plate count and Enterobacteriaceae count are screened.
- C. Any specifications different from or not listed on the product bulletin must be agreed upon between the customer and Grain Processing Corporation during specification approval.

7. Product Release

GPC has standard product specifications. If a customer does not have a unique customer specification, they will be assigned the standard product specifications. If a customer specification differs from the standard, and GPC has agreed to the specification, the specification is built into the LIMS database. In either case, the specification is linked to the customer in our LIMS database. Quality Assurance will release lots based on the conformance of the test data to the customer specification. This is done by the LIMS using the lot selection application and the 'First In, First Out' (FIFO) system. Certificates of Analysis (COA) are also unique to each customer and are linked to the customer/item specification. We can provide COAs on each lot shipped if requested. Products are released for shipment by QA only after all analyses are completed and verified.

8. Corrective Action

Documentation for Correction Action and Customer Complaints is in the Quality Manual and will be available for viewing during a customer visit or audit. If a customer contacts GPC with a complaint or nonconformance, the customer service representative or Salesperson determines the nature and extent of the nonconformance and the lot number(s) involved. A Customer Complaint form is begun for the nonconformance and copies are sent to the Quality, Production and Traffic departments. They will work to determine the cause of the nonconformance and the corrective measures taken to prevent the nonconformance from occurring again. In all cases, the Customer Complaint form will be completed by the appropriate departments and the normal distribution will be given to the complaint. The Senior Vice President of Operations will ensure that the appropriate corrective action has been implemented and is functioning effectively. Quarterly the complaints are

summarily complied through out the year and summaries are sent to all upper management.

9. Notification of Change

GPC will notify the customer of any change that may compromise the food safety, quality, consistency, or agreed upon specification of a finished product.

10. Allergens

GPC MALTRIN® products are processed from dent corn and are not considered an allergen. They do not contain celery; egg product; dairy products/lactose; peanuts, soybeans, nuts, seeds, tree nuts and their oils/extracts; wheat/gluten; seafood; antibiotics; colors; animal fats and oils; monosodium glutamate; tartrazine or cottonseed flour. MALTRIN® products are processed from corn starch on dedicated equipment. We contact all our suppliers and have them fill out a questionnaire to ensure none of these allergens are contained in ingredients we use in our process. SO₂, a sensitizer may be present but, if so, at levels < 10 ppm.

Section 3--Manufacturing

1. GMP Training of Personnel

New employees are trained on Safety, GMPs, HACCP, Right to Know, and Food-Grade handling procedures along with a variety of other training which includes safety and On-The-Job training. The Safety, GMPs, HACCP, Right to Know, and Food-Grade handling procedures are reviewed annually with all employees. All training is documented and kept on file for the length of that person's employment. On-the-job training is verified through a testing process.

2. Hazard Analysis Critical Control Points (HACCP)

- A. A HACCP team has evaluated the Maltrin® process and developed an effective HACCP flow diagram and chart. The team, which consists of Quality, Purchasing, Maintenance, and Production personnel meet at least annually to review the progress for any updates. The team is facilitated by the QA Coordinator for that product type.
- B. The QA HACCP facilitator has had outside HACCP training.
- C. Production and Analytical Services (QC) conduct annual HACCP training to their personnel.
- D. The HACCP program is audited annually as part of the annual internal audit. There are also quarterly checks in place.

3. Raw Material Suppliers/Testing

- A. There is an approved supplier list and program in place. Raw materials may be accepted based on COA, COC or testing, depending on the nature of the

ingredient. Supplier approval involves a supplier questionnaire returned, supplier approval of GPC specifications, and a possible audit.

B. In house raw material testing is done for critical ingredients.

4. Process

A. The MALTRIN® process is a continuous process. It is an enclosed system.

B. GPC Muscatine uses only city water. GPC Washington uses well water that has been validated to meet potable standards. Daily microbial monitoring on water is done. Yearly analytical testing is done. Backflow preventors are in place.

C. Drier air is double filtered and meets or exceeds ASHRAE 3A standards for spray driers.

D. All steam additives are GRAS.

5. Equipment Maintenance

A. Production equipment is on a Preventive Maintenance Program, which is automated through a computer program with our Maintenance Department.

B. All maintenance and calibration schedules are listed in Production SOP Manuals and are available for viewing during a customer audit or visit. The timing of the maintenance and calibration of various equipment has been determined by a set time or hours used, depending on experience of use and/or the manufacturer recommendations.

6. Cleaning Procedures/instructions

A. Procedures/instructions are listed in Production SOP Manuals and are available for viewing during a customer audit or visit. Only hot water is used in cleaning, no chemicals.

B. There is an environmental monitoring program in place that checks for Salmonella and Enterobacteriaceae.

7. Contamination Control

A. Sifters—Located prior to the rare earth magnets, they are 8-mesh stainless steel. At GPC Muscatine they are checked every 8 hours. At GPC Washington they are checked every 6 hours.

B. Rare earth magnets—Bagging lines #1 & #2 go through the rare earth magnets before packaging. The Super Sack line has a double rare earth magnet system. At GPC Muscatine they are cleaned and findings inspected two times per shift while in use. At GPC Washington they are cleaned and findings inspected every 6 hours. Pull tests are done yearly.

C. Metal Detector—The metal detector is located after the bagging unit. It is a Safeline and has a visual and audio alarm system. There are three test cards; a 2.5 mm ferrous, a 3.0 mm nonferrous, and a 3.2 mm stainless steel. Metal detectors

are checked every 8 hours at GPC Muscatine and every 6 hours at GPC Washington. Both locations have a contract with an outside company to service the metal detectors on a routine basis.

D. If any of the above checks fail inspection, bagging is stopped and an investigation occurs to identify the source. If it can not be identified and accounted for, the material is destroyed back to the last good check.

E. There is a “No Glass” policy in production.

8. Bagging Scales

They are calibrated at the beginning of each shift with approved weights and an outside contractor calibrates them once per month.

9. Packaging

A. For 50 pound bags, each bag is shrink wrapped and the pallet is stretched.

B. Only new, hard wood pallets are used. Pallets are heated treated for insect control.

C. Slip sheets are used between the pallet and the product bags or totes.

10. Segregation of Non-conforming Product

If a finished product does not meet customer requirements, the material is tagged as reject and moved to an area pending appropriate disposition. No Maltrin® is reworked.

11. Outside Warehouse/Shipping

At our GPC warehouse locations we have limited storage space. We contract storage space with an outside warehouse, with whom we have had a long and successful working relationship. They store GPC product in only food grade warehouses and are audited on a regular basis. For shipping, we work with a select number of carriers who are aware of our requirements or with customer trucks. Shipping conveyances are inspected prior to loading using a check off list. The list contains a preloading inspection as well as a postloading inspection. Both must be completed and signed. They are then sent to QA.

Section 4--Product Lot Identification and Traceability

1. Product Traceability

A. Traceability of a finished lot to customers is tracked in the LIMS. There are written procedures for performing a pull back of nonconforming material.

B. Maltrin production is a continuous process. Process traceability to finished lots is available, as the product is stored in bins prior to bagging. The filling of these bins can be traced to the date of production.

C. GPC is registered with the FDA for the Bioterrorism Act of 2002 and can do complete traceability of product from raw ingredients and supplier to finished product and customer.

2. Lot Numbering

Finished lots are coded as shown: M08012201. The first alpha letter is the product, M = Maltrin®; the first two numbers are the year, 08 = 2008; the next three numbers are the Julian date, 122 = May 1; the next two numbers are the lot of the day, 01 = first lot of day. Additional coding may be included in the numbering for internal use.

3. Recall Program

- A. GPC has a recall procedure in place that follows FDA guidelines. A recall team has been identified and individuals' contact information is in the SOP.
- B. Mock recalls are done annually and may involve a single lot to all customers, multiple lots based on ingredient, or multiple lots based on bag products. Effectiveness of the mock recall is documented in terms of time of exercise and % recovery.

Section 5--Pest Control

1. Licensed Pest Control Company

We contract with an outside Licensed Pest Control Company. They have a licensed pest control officer on site five days per week at GPC Muscatine and three days per week at GPC Washington.

2. Pesticide storage

No pesticides are stored on site. All pesticides are food grade approved.

3. Traps

A combination of bait stations outside of buildings and glue boards and/or mechanical traps inside buildings are used. Pheromone traps are also used to monitor insect activity.

Section 6—SAFETY AND SECURITY

1. Work Area

All work areas comply with established safety, regulatory and environmental standards and codes.

2. Measures of Prevention

The proper measures for the prevention of any security related incidents are followed. The following activities are used to accomplish the security level needed to operate within the limits of the QMS:

- Operational Risk Management (ORM)
- 24 hour Guard

- Fenced Perimeter and Camera
- Background checks
- Bioterrorism Threat Action Plan
- Product and ingredient tracking program
- Visitor access control
- Cooperation and collaboration with local, state, and federal authorities (i.e. police, U.S. coast guard, FDA, etc.)
- Audits – internal audits, customer audits, supplier audits
- Employee training



Grain Processing Corporation
1600 Oregon Street
Muscatine, IA 52761-1494 USA
Phone: 563-264-4847 ▼ Fax: 563-264-4617

Carla R. Hilton
Quality Assurance Manager

December 8, 2010

To Whom It May Concern:

You have asked about the presence of residual solvents in Grain Processing Corporation's MALTRIN® products. Based on the ICH Q3C- Impurities – Guideline for Residual Solvents, the following residual solvents would be present.

<u>Class</u>	<u>Quantity</u>
Class 1	None Present
Class 2	None Present
Class 3	None Present
Other Residual Solvents (table 4)	None Present

This is based on knowledge of the manufacturing process and controlled handling, shipping, and storage of the material. There is no potential for specific toxic solvents to be present and the material, if tested, will comply with established standards.

Sincerely,

Carla (Casey) Hilton
Manager, QA and Compliance
Grain Processing Corp.
e-Mail: casey_hilton@grainprocessing.com

cc: File



1600 Oregon Street, Muscatine, IA 52761, USA
grainprocessing.com

January 2015

Allergen Status of Food/Pharmaceutical Starches and MALTRIN® Maltodextrins and Corn Syrup Solids

To Our Valued Customer,

Grain Processing Corporation MALTRIN® Maltodextrins, Corn Syrup Solids and Food Grade or Pharmaceutical Grade Starches do not contain celery; egg product; dairy products/lactose; peanuts, soybeans, nuts, seeds, tree nuts, sesame seeds and their oils/extracts; wheat/gluten; fish (all species); seafood (including molluscs and crustaceans) and; antibiotics; colors; animal fats and oils; monosodium glutamate; tartrazine; cottonseed flour or lupin and products thereof. Mustard is not contained in any of the above listed products. The above products are processed from corn starch. None of the allergens listed above are intentionally added, stored on-site, or used during processing of Grain Processing Corporation's products. All our suppliers complete an allergen questionnaire to ensure none of these allergens are contained in ingredients we may use in our process.

Steeping agents are traditionally used in the wet milling process to separate starch and other components from corn kernels. The manufacturing process reduces sulfites to low levels in the product. Our specification is less than 10 ppm, which is below the FDA concentration to be declared on food labels.

If you have any further questions about this matter, please feel free to contact us.

Sincerely,

Marcie Hanssen
Quality & Regulatory Specialist
Grain Processing Corporation
P 563.264.4735
F 563.264.4617
marcie_hanssen@grainprocessing.com



Grain Processing Corporation

1600 Oregon Street • Muscatine, Iowa 52761-1494 USA
Phone: 563-264-4265 • Fax: 563-264-4289

January, 2016

To Our Valued Customer:

RE: Continuing Guarantee

Dear Sir or Madam:

Each article comprising every shipment of or other delivery of our MALTRIN® maltodextrin and corn syrup solids we hereinafter make to you, on your order, is hereby guaranteed as of the date of such shipment or delivery to be, on such date, not adulterated or misbranded within the meaning of the U.S. Food, Drug and Cosmetic Act, as amended, and not an article which may not, under the provisions of said Act, be introduced into interstate or intrastate commerce, provided, however, that we do not guarantee against such goods becoming adulterated or misbranded within the meaning of said Act after shipment by reason of causes beyond our control.

By the acceptance of this guarantee, you agree, with respect to anything within its scope, including said article, (1) that you will not, by the processing, repackaging or labeling of said article, adulterate or misbrand said article within the meaning of the U.S. Food, Drug and Cosmetic Act, and (2) to promptly notify us, in writing, of any demand, complaint or proceeding, within your knowledge, for claimed violations of said Act, as amended, giving the name and address of the complainant and the name of the product involved.

This is a general, continuing and nonassignable guarantee, subject to revocation on written notice thereof, issued pursuant to said Act, as amended (including the Food Additive Amendment of 1958 and subsequent amendments), and terminates and supersedes like guarantees that we may have given you previously.

Very truly yours,

GRAIN PROCESSING CORPORATION

Brian A. Tompoles Vice President
Food/Pharmaceutical/Personal Care

BAT/sb



1600 Oregon Street, Muscatine, IA 52761, USA
grainprocessing.com

April 28, 2016

To Whom It May Concern:

Regarding Grain Processing Corporation MALTRIN® maltodextrin and corn syrup solids, these products are processed from some GMO raw material but will typically test negative for GMOs. These products will not meet EU labeling regulations as a non-GMO.

If you have any questions regarding this information, please contact me at 563-264-4285, fax 563-264-4289 or via e-mail jim_ludman@grainprocessing.com.

Sincerely,

GRAIN PROCESSING CORPORATION

Jim Ludman
Manager Inside Sales Administration



IFANCA HALAL PRODUCT CERTIFICATE

August 26, 2019

Document No.: **GRA.7626.M.190015.US**

GRAIN PROCESSING CORPORATION

1600 Oregon St
Muscatine, IA 52761 USA

To Whom It May Concern:

This is to certify that **GRAIN PROCESSING CORPORATION** produces Halal products under the supervision of the Islamic Food and Nutrition Council of America (IFANCA) at the following locations:

<u>Plant Location</u>	<u>IFANCA Plant#</u>
1. Muscatine, Iowa 52761 USA	12400
2. Washington, Indiana 47501 USA	7627
3. Mooresville, Indiana 46158 USA	4278
4. Hammond, Indiana 46320 USA	4029

The following products are certified to be **Halal**. The company may use the **Crescent-M Halal** logo.

Product Type: Food Ingredients.

Muscatine, Iowa Plant

- MALTRIN Maltodextrins and Corn Syrup Solids
- MALTRIN SS V184 Maltodextrin, Food Grade
- MALTRIN SS V204 Dried Glucose Syrup, Food Grade
- Pure Food Corn Starches and Modified Corn Starches
- Crude Corn Oil
- GPC B20F IP Industrial Unmodified Corn Starch

Washington, Indiana Plant

- MALTRIN Maltodextrins and Corn Syrup Solids
- MALTRIN SS V184 Maltodextrin, Food Grade
- MALTRIN SS V204 Dried Glucose Syrup, Food Grade
- GPC B20F IP Industrial Unmodified Corn Starch

Mooresville, Indiana plant

- MALTRIN Maltodextrins and Corn Syrup Solids
- Pure Food Corn Starches and Modified Corn Starches

Hammond, Indiana plant

- MALTRIN Maltodextrins and Corn Syrup Solids
- Pure Food Corn Starches and Modified Corn Starches

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



Muhammad Munir Chaudry, Ph.D.
President





ORTHODOX UNION

LETTER OF KOSHER CERTIFICATION

נס"ד

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

August 26, 2019

This is to certify that the following product(s) prepared by

Grain Processing Corporation, 1600 Oregon Street, Muscatine, IA 52761

at the following facilitie(s) are under the supervision of the Kashruth Division of the Orthodox Union and are kosher as indicated below.

Grain Processing Corp.-Muscatine, 1600 Oregon Street, Muscatine, IA
Grain Processing Corp.-Washington, 2000 Maysville Road, Washington, IN

Product Name	UKD-ID	Status	Certification Requirements
Brand: Maltrin			
• Corn Syrup Solids	OUV2-4553B11	Pareve	Symbol not required.
• Corn Syrup Solids	OUV2-6FAA67C	Pareve	Symbol not required.
• Maltodextrin	OUV2-D031029	Pareve	Symbol not required.
Brand: Maltrin QD			
• Corn Syrup Solids	OUV2-2925D78	Pareve	Symbol not required.
• Maltodextrin	OUV2-E27A9DC	Pareve	Symbol not required.

Brand: Maltrin SS

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.

Rabbi Menachem Genack, *Rabbinic Administrator, CEO*

This certification is valid through 09/30/2020



ORTHODOX UNION

LETTER OF KOSHER CERTIFICATION

נס"ד

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

August 26, 2019

Grain Processing Corporation (continued)

This is to certify that the following product(s) prepared by this company at the facilitie(s) listed above are 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: Maltrin SS (continued)			
• Dried Glucose Syrup, Food Grade	OUV2-2C034D8	Pareve	Symbol not required.
• Maltodextrin, Food Grade	OUV2-K5WKILB	Pareve	Symbol not 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.

Rabbi Menachem Genack, *Rabbinic Administrator, CEO*

This certification is valid through 09/30/2020