

NATIONAL SUGAR MARKETING

Chino Facility Food Safety Plan

**Granulated,
Powdered, &
Brown Sugar**

Version: 09/21/2022

Plan Contents:

Facility & Food Safety Information	2
Product Description: Granulated Sugar	3
Flow Diagram: Granulated	4
Product Description: Powdered Sugar	5
Product Description: Brown Sugar	6
Process Preventive Control: Metal Detection Summary	7
Supply-Chain Program	8
Amendments & Training	9
Corporate Recall Plan (NSM Website)	

Plan Approval

Warehouse Manager
(Local Coordinator):

Date: 03/18/2024

Quality Assurance:



Date: 03/18/2024

Facility Information

Facility Name:	Chino Facility
Facility Address:	5150 Edison Ave., Chino, CA 91710
Phone:	(909) 627-7472
Plant/Facility Manager:	Jose Callejon
Local HACCP Coordinator:	Jose Callejon
HACCP Coordinator (PCQI):	Mia Burns
Number of Employees:	<10 Full Time Employees
Temporary Employees:	Yes
Facility Description:	The Chino facility is a flat storage warehousing operation with a product conversion installation for packaged to bulk conversion. This facility can receive dry van trailer and boxcar shipments. After storage or conversion, this facility ships product via dry van trailer and bulk truck. Boxcar shipments are utilized to transport Remelt sugar back to the beet refineries for reprocessing.

Food Safety

Products:	Granulated Sugar, Powdered Sugar, & Brown Sugar		
Third Party Audit Standard:	SQF Food Safety Code: Storage and Distribution		
Certification Body:	CICS Americas		
Import Capability:	Yes, Sucden Americas is the importing agent for import cane sugar.		
Ingredients/Raw Materials:	Granulated sugar, powdered sugar, and brown sugar from beet and cane refineries.		
Packaging:	This facility does not package products.		
Prerequisite Programs:	1. Employee Training	2. Personnel Practices	3. Integrated Pest Management
	4. Equipment Calibration: Food Safety	5. Facility & Equipment Maintenance	6. Cleaning, Sanitation, and Waste Management
	7. Water & Air Monitoring	8. Physical Contaminant Control	9. Product Storage & Warehousing
	10. Product Distribution	11. Allergen Management	12. Chemical Control
	13. Supplier Approval	14. Visitors	

Team

Jose Callejon	Warehouse Manager	Preventive Controls Qualified Individual
Claritza Ramirez	Office Clerk	In-house training.
Daniel Hernandez	Warehouse Lead	In-house training.
Mia Burns	Quality Assurance Specialist	Preventive Controls Qualified Individual

General Product Information

Product Name:	Granulated Sugar
Technical Name:	Sucrose
Product Description:	Sucrose is a nonreducing disaccharide composed of glucose and fructose bonded by an oxygen atom. It is derived from sugar beets or sugar cane and is used as a food and a sweetener. Sugar products are typically classified as low-risk, shelf-stable products.
Ingredients:	Crystalline sucrose
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener.
Intended Consumer:	Granulated sugar is sold as retail or distributed to food processors that provide products to the general public, including high risk groups.
Shelf Life:	5 years, 70%RH, 90°F
Labeling Instructions:	No labeling requirements for consumer safety.
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	Packaged product is warehoused in an ambient environment.
Distribution:	Granulated sugar is distributed in bulk or packaged form. Bulk sugar is transported by truck. Packaged sugar is distributed by trailer.

Technical Information

Chemical Formula:	C ₁₂ H ₂₂ O ₁₁
Water Activity (a_w):	0.22 ¹
Moisture:	0.04% Max.
Sulfites:	2 to 5 ppm. Must be less than 10 ppm.
Microbiological:	Will not support the growth of vegetative pathogens. ^{2,3} Meets ISBT ⁴ and NFP ⁵ standards for use in carbonated beverages and canned foods. Classified as low risk by the ICMSF 2005 ⁶ .

Preventive Controls

Process Control:	CCP Metal Detection
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	Approved Supplier for Sugar Ingredient and Third-Party Audit Report to Verify Metal Detection.

¹ [Water Activity Values of Select Food Ingredients and Products](#)

² [Microbial Risk Assessment: Pathogen Challenge Evaluations of Granulated and Liquid Sugar](#)

³ [Fate of Bacterial Pathogens and Indicator Organisms in Liquid Sweeteners](#)

⁴ International Society of Beverage Technologists (ISBT)

⁵ GMA Canner's Standard

⁶ [International Commission for the Microbiological Specifications for Food: 12 Sugar, Syrups, and Honey \(2005\)](#)

General Product Information

Product Name:	Confectioner's Powdered Sugar
Technical Name:	Powder Sugar
Product Description:	Pulverized or ground granulated sugar with corn starch for anti-caking properties.
Ingredients:	Crystalline sucrose and corn starch
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener.
Intended Consumer:	Powdered sugar is sold as retail or distributed to food processors that provide products to the general public, including high risk groups.
Shelf Life:	2 years
Labeling Instructions:	No labeling requirements for consumer safety.
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	Packaged product is warehoused in an ambient environment.
Distribution:	Powder sugar is distributed by trailer or boxcar.

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11} + C_{12}H_{48}O_{20}$
Water Activity (a_w):	0.59 (Light) - 0.65 (Dark) ¹
Moisture:	Less than 3%
Sulfites:	2 to 5 ppm. Must be less than 10 ppm.
Microbiological:	Will not support the growth of vegetative pathogens. ^{2,3} Meets ISBT ⁴ and NFP ⁵ standards for use in carbonated beverages and canned foods. Classified as low risk by the ICMSF 2005 ⁶ .

Preventive Controls

Process Control:	None
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	None

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² [Microbial Risk Assessment: Pathogen Challenge Evaluations of Granulated and Liquid Sugar](#)

³ [Fate of Bacterial Pathogens and Indicator Organisms in Liquid Sweeteners](#)

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⁵ GMA Canner's Standard

⁶ [International Commission for the Microbiological Specifications for Food: 12 Sugar, Syrups, and Honey \(2005\)](#)

General Product Information

Product Name:	Brown Sugar (Light and Dark)
Technical Name:	Brown Sugar
Product Description:	Classified granulated sugar enrobed in invert sugar (coating syrup) or cane molasses.
Ingredients:	Sucrose, invert sugar, and cane molasses
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener.
Intended Consumer:	Brown sugar is sold as retail or distributed to food processors that provide products to the general public, including high-risk groups.
Shelf Life:	18 months
Labeling Instructions:	No labeling requirements for consumer safety.
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	Packaged product is warehoused in an ambient environment.
Distribution:	Brown sugar is distributed by trailer or boxcar.

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11} + C_{12}H_{24}O_{12}$ (Light) or $C_{12}H_{22}O_{11} + C_6H_{12}NNaO_3S$ (Dark)
Water Activity (a_w):	0.31 ¹
Moisture:	0.5% Max.
Sulfites:	2 to 5 ppm. Must be less than 10 ppm.
Microbiological:	Will not support the growth of vegetative pathogens. ^{2,3} Meets ISBT ⁴ and NFP ⁵ standards for use in carbonated beverages and canned foods. Classified as low risk by the ICMSF 2005 ⁶ .

Preventive Controls

Process Control:	None
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	None

¹ [Water Activity Values of Select Food Ingredients and Products](#)

² [Microbial Risk Assessment: Pathogen Challenge Evaluations of Granulated and Liquid Sugar](#)

³ [Fate of Bacterial Pathogens and Indicator Organisms in Liquid Sweeteners](#)

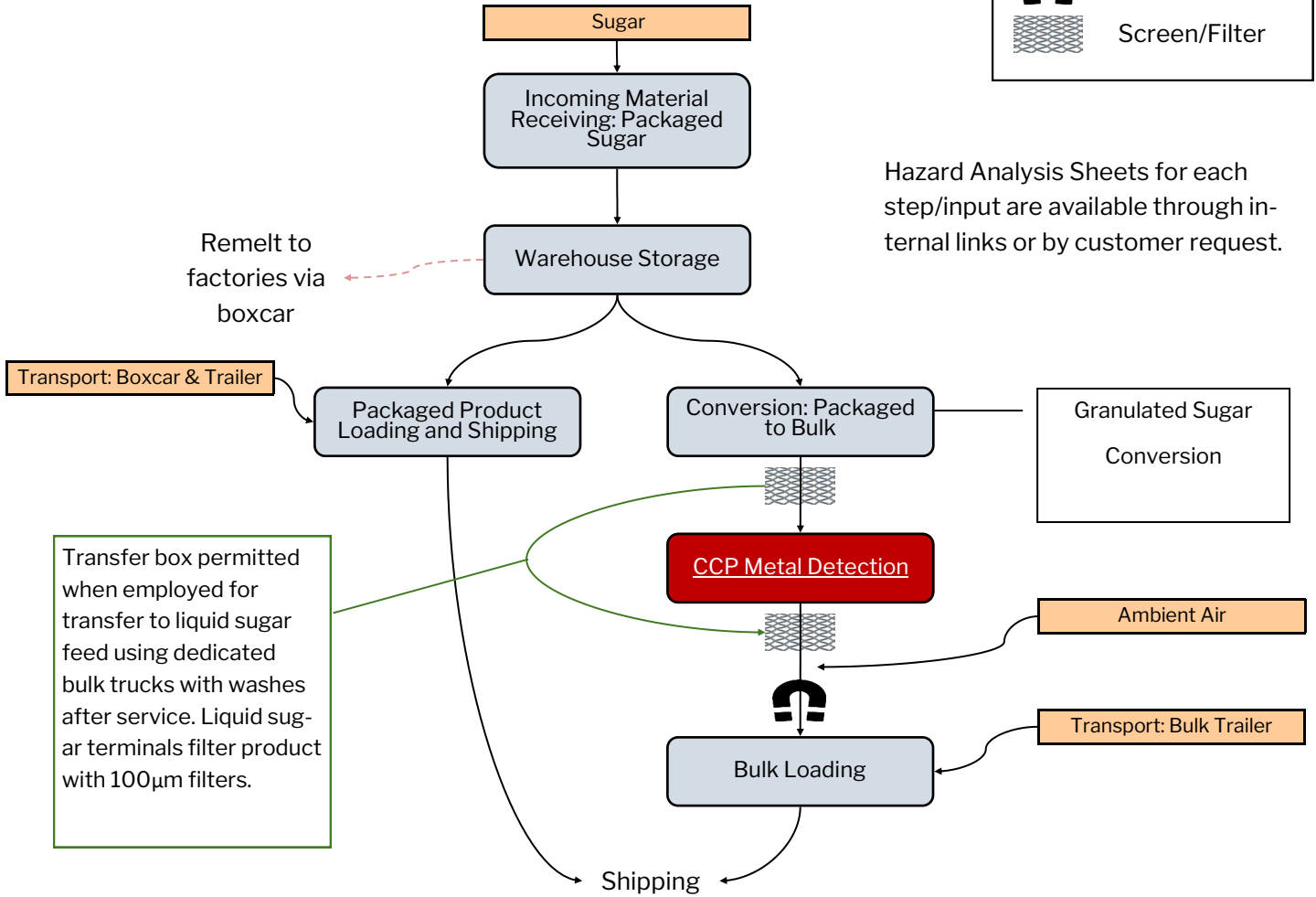
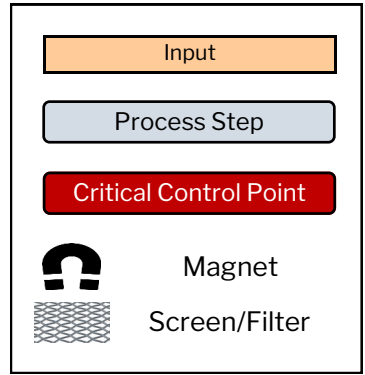
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⁶ [International Commission for the Microbiological Specifications for Food: 12 Sugar, Syrups, and Honey \(2005\)](#)

Process Flowchart: Sugar Products

This flowchart outlines the steps from granulated sugar receiving through storage and shipping.



Transfer box permitted when employed for transfer to liquid sugar feed using dedicated bulk trucks with washes after service. Liquid sugar terminals filter product with 100µm filters.

Product Conveying Equipment & Hazard Analysis

- Pneumatic Blowing

Process Preventive Control: Critical Control Point Summary

Process Control Step:	CCP Metal Detection (Conversion Station)	
Hazard(s):	Metal	
Critical limits:	Functioning metal detector that can detect 1.5 Fe, 1.8 NF, 2.0 SS, and 2.0 Al mm spheres.	
Monitoring:	What:	All product passes through an operating metal detector.
	How:	Monitor according to SOP 6.3-01 CCP Monitoring: Metal Detector .
	Frequency:	Conduct the inspection at the beginning of a startup, a shutdown of two hours or longer, at the end of a production run (no following shift), and at least every 2.5 hours of operation. Bulk detectors are tested prior to startup and after each vessel.
	Who:	Trained warehouse operator.
Corrective Action:	Operator notifies supervisory personnel. Supervisory personnel complete corrective action per SOP 6.3.4-03 HACCP Deviation: Metal Detector .	
Verification:	Monitoring Activity:	Supervisory staff verify the monitoring activity through record review within 7 days of record generation indicated by a signature and date.
	Food Safety Plan:	The food safety plan is incorporated into annual internal audits. The plan, CCP selection, and CL determination are reviewed/assessed annually.
Validation:	Critical Control Point:	CCP selection is reevaluated annually in light of emerging technological and regulatory information; documented on record 7.1-03 Validation .
	Critical Limits:	CL or parameter selection is reevaluated annually in light of emerging technological and regulatory information; documented on record 7.1-03 Validation .
	Scientific & Technical:	Decisions for the hazard analysis, CCP selection, and CL selection have been based on scientific and technical information. This information is posted to the corporate intranet and may be accessed through this link .
Records:	Monitoring Activity: 6.3-01.1 Critical Control Point: Bulk Loading Metal Detector . Records are retained for three years.	

Procedural documentation is available on the corporate intranet through direct links or through the quality assurance tab. This documentation will be made available to customers upon request.

Supply-Chain Program

Hazards Requiring a Supply-Chain-Applied Control:	<p>Hazard analysis determined that incoming sugar requires a supply-chain-applied control for metal contamination. In the absence of a supplier-applied control, there could be the potential for hazardous metal contamination based on sugar processing equipment and facilities. Some of this product might be warehoused and distributed directly to the customer without further processing.</p>
Preventive Controls Applied by Supplier:	<p>Approved suppliers pass all product through metal detectors or magnets. These actions are documented in a supplier's records.</p>
Verification Activities:	<p>Based on supplier performance and the low risk associated with material, a 2nd or 3rd party audit by a qualified auditor is used to verify supplier's control of metal hazard. Preference is given to GFSI certification.</p>
Verification Procedures:	<p>A copy of the audit is requested from the supplier annually or every three years if the supplier certifies to the FSSC 22,000 standard. The vice president of quality reviews certification audits and approves suppliers based on the onsite audit and documentation requests. System assurances include a two-step verification procedure. First, Corporate office only sources product from approved suppliers. Second, receiving facilities are given access to an approved supplier register which is utilized as a product acceptance criterion. Both measures should ensure that receiving facilities only receive sugar products from approved suppliers. Full documentation can be provided within 24 hours of an official request.</p>
Verification Records:	<p>NSM's Partner, Sucden Americas, maintains onsite audit records per their FSVP. Supplier audit reports are made available from NSM upon request.</p>
Receiving Facility Procedures:	<p>Receiving facility only accepts product from approved suppliers as outlined on the Approved Supplier Register. This register is located under the Quality Assurance Tab of the intranet. Facilities hold and do not accept shipments from unapproved suppliers. If this occurs, facilities notify the quality assurance director for disposition.</p>
Receiving Records:	<p>Inspection and receipt records are maintained locally.</p>

Amendments

03/18/2024	Included Jose Callejon's PCQI training.
09/21/2022	Removed Jeremy Adamson as PCQI and added Mia Burns. Added product description for powdered and brown. Granulated Sugar Conversion section to flowchart.
01/10/2020	Added Claritza Ramirez to team and removed Janet Rocha. Added Mia Burns to Team and updated training log with Mia's certification. Added transfer box line and transfer requirements.
07/01/2019	Modified warehouse address as equipment was moved from the Yorba address to the Edison address. Reverted links from Basicsafe to the intranet.
09/06/2016	Renamed the HACCP plan to Food Safety Plan. Removed the local organizational chart. Developed the Supply-Chain Program and added links to the corporate recall procedure. The hazard analyses have been uploaded to the corporate intranet and are available through links within the food safety plan. Removed Juan Ruiz from the HACCP team and added Daniel Hernandez.
12/22/2014	Corporate standardization of SOPs. SOPs and blank record copies have been moved from the HACCP plan to the corporate intranet. Updated the ORG chart due to reorganization efforts.
01/10/2013	Review of current plan and modification of facility description to include packaged to bulk product conversion. Updated HACCP team by removing Antonio Valentin and Jorge Angeles and replacing them with Tamara Ayala and Leonardo Hugo.

Training Log

03/18/2024	Included Jose's PCQI training.
03/10/2022	Mia Burns completed HACCP training refresher course.
03/13/2019	Mia Burns completed FSPCA Preventive Controls for Human Food course.
01/21/2016	Jeremy Adamson completed FSPCA Preventive Controls for Human Food course.
08/21/2015	Jose Callejon attended the corporate standardization meeting to cover all topics related to HACCP and sugar products.
03/14/2015	Jeremy Adamson completed Three Day: Practical Food Safety and HACCP Workshop.