Dairy Farmers of America

Finished Product Specification

Product Name	Nonfat Dry Milk med heat grade A 25kg		Product Code	311, 325, 87026	
Initial Date	10.23.2009	Revision Date	12.31.2009	Supersedes Date	10.23.2009

Revision 1 – 12.31.2009

Revision History

Date	Changes Made
12.31.2009	Changed formatting and included product # 311 since Winthrop #'s changed. Added facility-specific lot coding information to XVIII. Amended section VII regarding antibiotic residues and section XIV regarding minimum storage temperature.

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I. General Information:

A. Product Name:	Nonfat Dry Milk, medium heat, grade A (extra grade)
B. Item Name:	n/a
C. Product Code:	311, 325, 87026
D. UPC:	n/a
E. GTIN/SCC:	n/a
F. Formula Code:	n/a
G. Label or Brand Name:	DFA
H. Customer:	n/a
I. Packaging Configuration:	25 kg bags
J. Weight:	25 kgs
K. Dimensions:	n/a
L. Export or Domestic:	Domestic

II. Product Description: Nonfat Dry Milk is the powder that is obtained by removing water from pasteurized skim milk or condensed milk.

III. Ingredient Statement: Milk

IV. Allergens:	Does Not Contain	Contains	Uses Shared Equipment	Used in Facility
Milk & Milk Products (butter, buttermilk, casein, cheese, cottage cheese, curds, whey, lactoglobulin, malted milk, some margarines, milk chocolate, cream, custard, ice cream, nougat, pudding, sodium caseinate, sour cream or yogurt and lactose if it contains protein)		X		
Eggs & Egg Products (including mayonnaise and meringues)	X			
Fish (all species including finfish)	X			
Crustacean (shrimp, crab, lobster, crayfish)	X			
Peanuts	X			
Soybeans	X			
Tree Nuts (coconut, almond, walnut, pecan, cashew, Brazil, pistachio, hazelnut, pine nut pinon, macadamia, chestnut, and hickory)	X			
Wheat (bran, bread crumbs, cereal extracts, cracker meal, farina, graham flour, malt, wheat flour, germ, gluten, starch, and semolina)	X			
Seeds (cottonseed, poppy, sesame, or sunflower)	X			
Celery (root, stalk, or leaves)	X			

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V. Claims:

	None		Low Sodium		Real Seal (Dairy)
x	Kosher		Reduced Sodium		Real California Milk
	Halal		Sodium Free		GMO Free
	Organic		Low Cholesterol		Gluten Free
	Low Fat		Cholesterol Free		No Sugar Added
	Reduced Fat		Zero Calorie		All Natural
	Fat Free		Low Calorie		Free of Corn / Corn Derivatives
	Trans Fat Free		Child Nutrition		Other:

VI. Product Certifications:

The product shall conform to the requirements of the Federal Food, Drug, and Cosmetic Act as amended and any applicable State and local regulatory provisions. The materials and workmanship are to be of sound quality and the product prepared under sanitary conditions in accordance with applicable Good Manufacturing Practices. The product is produced in a USDA approved facility.

A. Indicate (X) if these certifications are applicable:

x	Kosher Certified
at some locations	Halal Certified
	Organic Certified

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VII. Chemical Properties:

Special instructions: Aseptically collect samples from each product lot. Examine samples according to the frequency listed.

Analysis Name	LCL	Target	UCL	UOM	Frequency	Testing Lab	Method	Short Comment
Milkfat	--	--	1.25	%	Per lot	Plant	SMEDP / AOAC	
Titratable Acidity	--	--	0.15	%	Per lot	Plant	SMEDP	
Moisture	--	--	4.00	%	Per lot	Plant	ADPI	
Whey Protein Nitrogen	1.51	--	5.99	mg / g	Per lot	Plant	ADPI	
Solubility Index	--	--	1.20	mL	Per lot	Plant	SMEDP	
Scorched Particle Content	--	--	15.0	mg	Per lot	Plant	ADPI	Disc B
Antibiotic Residues	--	--	Negative	n/a	On raw materials	Plant	Charm SL	Per PMO requirements
Protein	34.0	--	--	%	Per lot	Chestnut Labs	AOAC	

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VIII. Microbiological Properties:

Special instructions: Aseptically collect samples from each product lot. Examine samples according to the frequency listed.

Analysis Name	LCL	Target	UCL	UOM	Frequency	Testing Lab	Method	Short Comment
Aerobic Plate Count	--	--	10,000	Per gram	Per lot	Plant	AOAC / FDA BAM	
Coliform	--	<10	--	Per gram	Per lot	Plant	AOAC / FDA BAM	
Salmonella	--	--	Negative	Per 375 grams	Per lot	Chestnut Labs	AOAC	
Yeast and Mold	--	--	100	Per gram	Per lot	Plant	FDA BAM	
Escherichia coli	--	<10	--	Per gram	Per lot	Chestnut Labs	AOAC	
Coagulase-positive Staphylococci	--	<10	--	Per gram	Per lot	Chestnut Labs	FDA BAM	

Recognized Methodologies for Testing:

- AOAC – Association of Analytical Communities
- FDA BAM – Food and Drug Administration Bacteriological Analytical Manual
- SMEDP – Standard Methods for the Examination of Dairy Products
- USDA FSIS Microbiology Laboratory Guidebook
- ADPI – American Dairy Product Institute
- AOCS – American Oil Chemist Society
- Validated Vendor Methods such as FOSS, Mettler, etc

IX. Sensory Properties:

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Test Type	Short Comments	Analysis	Standard	Frequency	Testing Lab
Sensory		Appearance / Color	Uniform white to light cream color, no hard lumps, and practically free from visible dark particles	Per lot	Plant
Sensory		Flavor / Odor	Sweet, clean and pleasing with no off colors	Per lot	Plant
Sensory		Body / Texture	Free flowing or lumps that break up under moderate pressure	Per lot	Plant

X. Packaging: Packed in multi-wall Kraft paper bags with polyethylene liners.

Indicate all that apply and include further details in the field above:

	Primary Packaging	Secondary Packaging	Tertiary Packaging
Bag	x		
Barrel			
Closure			
Corrugated Shipper			
Flexible Film or Wrap			
Flexible Lid Stock			
Flexible Pouch			
Label			
Liner			
Paperboard/Carton			
Rigid Plastic Container			

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XI. Nutritional Information: Value Per 100 grams Reference – USDA NDB #: 01091

Calories	362	
Calories from Fat	6.93	% Daily Value
Total Fat	0.77 g	%
Saturated Fat	0.499 g	%
Trans Fat	0.023 g	%
Polyunsaturated Fat	0.030 g	%
Monounsaturated Fat	0.201 g	%
Cholesterol	20 mg	%
Sodium	535 mg	%
Potassium	1794 mg	%
Total Carbohydrate	51.98 g	%
Dietary Fiber	0 g	%
Sugars	51.98 g	%
Other Carbohydrates	0 g	%
Protein	36.16 g	%
Vitamin A	22 IU	%
Vitamin C	6.80 mg	%
Calcium	1257 mg	%
Iron	0.32 mg	%
Vitamin D	332 IU	%
Vitamin E	0 mg	%
Vitamin K	0.10 mcg	%
Thiamin	0.415 mg	%
Riboflavin	1.55 mg	%
Niacin	0.951 mg	%
Vitamin B6	0.361 mg	%
Folate	50 mcg	%
Vitamin B12	4.03 mcg	%
Biotin	20.1 mcg	%
Pantothenic Acid	3.56 mcg	%
Phosphorus	968 mg	%
Iodine	235 mcg	%
Magnesium	110 mg	%
Zinc	4.08 mg	%
Selenium	27.3 mcg	%
Copper	0.041 mg	%
Manganese	0.02 mg	%
Chromium	-- mcg	%
Molybdenum	18.9 mcg	%
Chloride	-- g	%

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XII. Labeling: (of individual packages and of cases including type of application such as ink jet or preprinted packaging)

A. Internal Product Coding:

Code Example (as it appears on packaging) – N/A

Code Breakdown (explanation) - N/A

Location of Code on Product - N/A

B. Shipping Unit Product Coding: Varies by production facility. Please see attachment section XVIII.

Shipping Unit Coding Example – N/A

Shipping Unit Code Breakdown – N/A

Location of Code on Product – N/A

XIII. Pallets:

Pallets shall be free from all foreign material, contain no double stringers, be of sound construction with no broken or missing boards, and be free from rodent and pest harborages.

A. Palletizing Requirements (stretch wrap, slip-sheets, etc): bags are palletized and stretch wrapped for stability

B. Pallet Pattern: N/A

C. Labeling and Pallet Identification: N/A

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XIV. Storage and Transportation: Product should be shipped and stored in a cool dry environment with relative humidity below 70%

	Minimum	Maximum	(degrees F)
A. Warehouse Storage Temperature	--	80	
B. Transportation Temperature	--	80	

All trailers are to be sealed with a DFA numerical seal with seal number documentation maintained.

C. Bill of Lading Requirements:

XV. Age Requirements:

In order to allow for time to conduct required testing, product will not be shipped until a minimum of **5** days after manufacture without customer's written approval. If analytical results can be returned in fewer than this minimum number of days, product will be free to ship without customer's written approval.

Expected shelf life is approximately **365** days from date of manufacture at specified storage requirements.

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XVI. Special Instructions:

Dairy ingredients must be domestically sourced.

A. Certificate of Analysis Requirements: COA's may accompany shipment at the customer's request.

XVII. Producing DFA Facilities (Facility Name and USDA #):

	Adrian (26-619)		Plymouth		Co-manufacturer (list)
	Beaver (49-57)	x	Reading (42-242)		
	Cabool		Schulenburg		
	Fort Morgan (08-32)		Springfield		
x	Goshen (18-61)		Turlock (06-062)		
x	Hughson (06-219)		Ventura		
	Mechanicsburg		West Middlesex (42-674)		
x	Middlebury Center (42-573)	x	Winnsboro (48-0943)		
	Monett (29-414)	x	Winthrop (27-484)		
	New Wilmington (42-569)		Zumbrota (27-646)		

XVIII. Attachments:

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A. Lot coding explanation by production facility:

Fort Morgan, CO Lot Coding Information

Lot Coding Format:	JJJY LLL BBB	
Explanation:	JJJ	3 digit Julian date of manufacture
	Y	last digit of year of manufacture
	LLL	3 digit lot #
	BBB	3 digit bag or tote #

Goshen, IN Lot Coding Information

Lot Coding Format:	JJJY LLL	
Explanation:	JJJ	3 digit Julian date of manufacture
	Y	last digit of year of manufacture
	LLL	3 digit lot #

Hughson, CA Lot Coding Information

Lot Coding Format:	BBB MM/YY LLL HH:MM SS P:DDMMYYYY E:DDMMYYYY	
Explanation:	BBB	3 digit bag number
	MM/YY	Month and year of manufacture
	LLL	3 digit lot #
	HH:MM	Time of manufacture
	SS	sublot#
	P:	Production date as day, month, year
	E:	Expiration date as day, month, year

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Reading, PA Lot Coding Information

Lot Coding Format:	YJJJSCCLQQQPP	
Explanation:	Y	Last digit of year of manufacture
	JJJ	3 digit Julian date of manufacture
	S	System ID
	CC	Commodity Code
	L	Load ID
	QQQ	Load Sequence
	PP	Package Type

Winnsboro, TX Lot Coding Information

Lot Coding Format:	JJJYLLLBBII##	
Explanation:	JJJ	3 digit Julian date of manufacture
	Y	year of manufacture
	LLL	lot #
	BB	bag #
	II	operator's initials
	##	weight designation

Winthrop, MN Lot Coding Information

Lot Coding Format:	092-YJJJ-LL-BB	
Explanation:	092	DFA plant #
	Y	last digit of year of manufacture
	JJJ	3 digit Julian date of manufacture
	LL	Lot #
	BB	Box or Tote #

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