



Product Specification

Nonfat Dry Milk, Grade A Low Heat, rBST Free

Heat Stable

Specification HD 100 HS

Date Issued: 11/7/2011

Supersedes: 6/4/2010

Approved By: Shawn Burton

1. **Product Description:** Nonfat Dry Milk, Grade A Low Heat is free from lumps, except those that break up readily under slight pressure. The product has a sweet and desirable flavor, may have a slight degree: chalky, cooked, feed and flat. The color shall be white or cream and free from unnatural color.

1a. **Composition:** Nonfat dry milk is the result from removal of fat and water from milk and contains lactose, milk proteins and milk minerals in the same relative proportions as the fresh milk from which it was made. The raw milk is fresh, sweet milk produced by rBST free healthy cows, that has been pasteurized during manufacture at High Desert Milk. The nonfat dry milk does not contain any whey proteins or any added preservative, neutralizing agent or other chemicals.

2. **Physical and Chemical Requirements:**

	<u>Limit</u>	<u>Methods</u>
Moisture	4.0% (Maximum)	SM15.11 / InfraXact
Acidity	0.15 (Maximum)	SM 15.021
Fat	1.25 (Maximum)	InfraXact / DQCI
Whey Protein	6.0 mg (Maximum)	InfraXact / DQCI
Protein	34% – 37%	InfraXact / DQCI
Lactose	49.5% – 52.0%	InfraXact / DQCI
Ash	7.8% – 8.4 %	InfraXact / DQCI
Solubility Index	1.25 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm
Antibiotics	Not found	Idexx
Scorched Particles	7.5 mg (Maximum) A pad	Sediment Scorch Test

3. **Bacteriological Requirements**

	<u>Limit</u>	<u>Methods</u>
Standard Plate Count	10,000 cfu/g (Max)	AOAC 986.33 – 989.10
E Coli	Negative /10g	AOAC 991.14
Yeast & Mold	<10 cfu/g (Maximum)	AOAC 997.02
Coliform	10 cfu/g (Maximum)	AOAC 986.33 – 989.10 – 996.02
<i>Staph aureus (Coag. Positive)</i>	Negative /10 g	AOAC 2003.08
Salmonella	Negative /25g	AOAC 960801/BAM FDA
Enterobacteriaceae	Negative/10g	AOAC 2003.01

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%
Minerals	8.2%
Heat Stability	>20 minutes at 120° Celsius
Color	White to light cream
Flavor	Free from objectionable flavors

**Shelf Life and Storage**

Product is good for 2 years after manufacture date. Product is to be stored in a cool to ambient, dry and ventilated odor free place.