



Product Specification
 Nonfat Dry Milk, Grade A Low Heat, rBST Free
 Standard

Specification 10001
 Date Issued: 3/10/2018
 Supersedes: 1/1/2018
 Good Through 12/31/2018

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 cooked and clean flavor. 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 added 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)	AOAC 989.04
Whey Protein Nitrogen Index	6.0 mg (Minimum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%
Minerals	8.2%



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Nonfat Dry Milk, Grade A Low Heat, rBST Free
Standard

Approved By: Shawn Burton

Specification 10001
Date Issued: 3/10/2018
Supersedes: 1/1/2018
Good Through 12/31/2018

Color	White to light cream
Flavor	Free from objectionable flavors

Shelf Life and Storage

Product is good for 2 years after manufacture date. Product should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free
Standard

Approved By: Shawn Burton

Specification 20001

Date Issued: 3/10/2018

Supersedes: 1/1/201

Good Through 12/31/2018

1. **Product Description:** Nonfat Dry Milk, Grade A Medium 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 cooked and clean flavor. 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 non fat dry milk does not contain any added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5-5.99 mg (Minimum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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</i> (Coag. Positive)	Negative /10 g	AOAC 2003.08
Salmonella	Negative /25g	AOAC 960801/BAM FDA

4. **Proximate Analysis**



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Nonfat Dry Milk, Grade A Medium Heat, rBST Free
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Approved By: Shawn Burton

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Date Issued: 3/10/2018

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Good Through 12/31/2018

	<u>Typical</u>
Lactose	52.1%
Minerals	8.2%
Color	White to light cream
Flavor	Free from objectionable flavors

Shelf Life and Storage

Product is good for 2 years after manufacture date. Product should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free
Heat Stable

Approved By: Shawn Burton

Specification 20101

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

1. **Product Description:** Non-Fat Dry Milk, Grade A Medium 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 cooked and clean flavor. The color shall be white or cream and free from unnatural color.

1a. **Composition:** Non-Fat 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 added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5-5.99 mg (Minimum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%
Minerals	8.2%



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free

Heat Stable

Approved By: Shawn Burton

Specification 20101

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

Heat Stability

>15 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 should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free

Low therm

Approved By: Shawn Burton

Specification 22001

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

1. **Product Description:** Nonfat Dry Milk, Grade A Medium 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 cooked and clean flavor. 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 added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5-5.99 mg (Minimum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Cham/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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
Thermophilic Spore	<500 cfu/g	SMEDP8.040

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free

Low therm

Approved By: Shawn Burton

Specification 22001

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

Minerals	8.2%
Color	White to light cream
Flavor	Free from objectionable flavors

Shelf Life and Storage

Product is good for 2 years after manufacture date. Product should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free

Low therm/Heat Stable

Approved By: Shawn Burton

Specification 22101

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

1. **Product Description:** Nonfat Dry Milk, Grade A Medium 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 cooked and clean flavor. 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 non fat dry milk does not contain any added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5-5.99 mg (Minimum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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
Thermophilic Spore	<500 cfu/g	SMEDP8.040

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%



Product Specification

Nonfat Dry Milk, Grade A Medium Heat, rBST Free

Low therm/Heat Stable

Approved By: Shawn Burton

Specification 22101

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

Minerals	8.2%
Heat Stability	>15 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 should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification

Nonfat Dry Milk, Grade A High Heat, rBST Free Standard

Approved By: Shawn Burton

Specification 30001

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

1. **Product Description:** Nonfat Dry Milk, Grade A High 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 cooked and clean flavor. 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 added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5 mg (Maximum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%
Minerals	8.2%



Product Specification

Nonfat Dry Milk, Grade A High Heat, rBST Free
Standard

Approved By: Shawn Burton

Specification 30001

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

Color

White to light cream

Flavor

Free from objectionable flavors

Shelf Life and Storage

Product is good for 2 years after manufacture date. Product should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification
 Nonfat Dry Milk, Grade A High Heat, rBST Free
 Low Therm
 Approved By: Shawn Burton

Specification 32001
 Date Issued: 3/10/2018
 Supersedes: 1/1/2018
 Good Through 12/31/2018

1. **Product Description:** Nonfat Dry Milk, Grade A High 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 cooked and clean flavor. 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 added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5 mg (Maximum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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
Thermophilic Spore	<500 cfu/g	SMEDP8.040

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%
Minerals	8.2%



Product Specification
Nonfat Dry Milk, Grade A High Heat, rBST Free
Low Therm
Approved By: Shawn Burton

Specification 32001
Date Issued: 3/10/2018
Supersedes: 1/1/2018
Good Through 12/31/2018

Color	White to light cream
Flavor	Free from objectionable flavors

Shelf Life and Storage

Product is good for 2 years after manufacture date. Product should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.



Product Specification
 Nonfat Dry Milk, Grade A High Heat, rBST Free
 Heat Stable Low Therm
 Approved By: Shawn Burton

Specification 32101
 Date Issued: 3/10/2018
 Supersedes: 1/1/2018
 Good Through 12/31/2018

1. **Product Description:** Nonfat Dry Milk, Grade A High 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 cooked and clean flavor. 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, and has been pasteurized during manufacture at High Desert Milk. The nonfat dry milk does not contain any added 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)	AOAC 989.04
Whey Protein Nitrogen Index	1.5 mg (Maximum)	InfraXact / ADPI Method
Protein	34% (Minimum)	AOAC 991.20
Ash	7.8% – 8.4 %	AOAC 945.46
Solubility Index	.125 (Maximum)	SM 15.171 Centrifugation
Phosphatase	20mU/ml (Maximum)	Charm Novalum/FDA
Antibiotics	Not found	Charm/AOAC certified
Scorched Particles	15 mg (Maximum) B pad	ADPI Sediment 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
Thermophilic Spore	<500 cfu/g	SMEDP8.040

4. **Proximate Analysis**

	<u>Typical</u>
Lactose	52.1%



Product Specification

Nonfat Dry Milk, Grade A High Heat, rBST Free

Heat Stable Low Therm

Approved By: Shawn Burton

Specification 32101

Date Issued: 3/10/2018

Supersedes: 1/1/2018

Good Through 12/31/2018

Minerals	8.2%
Heat Stability	>15 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 should be stored and shipped in a cool, dry environment with temperatures below 80°F (26°C) and relative humidity below 65%.