



# United Dairymen of Arizona

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## LactoFerrin – 95 (Bovine Lactoferrin Powder) Specification

**Description:** Lactoferrin is a globular glycoprotein with a molecular mass of about 80 kDa. It occurs naturally in milk and which has a vast range of bioactive functions, including microbial activity and iron binding capacity. LactoFerrin-95 is isolated from skim milk using innovative ion exchange chromatography system, ultra-filtration, and spray drying processes.

Parameter	Analysis	Method
Total Protein	≥93.0 db%	AOAC 991.20
<i>Lactoferrin</i>		
Protein (Purity)	≥95.0%	RP-HPLC
Iron Content	≤35.0 mg/100g	ICP-MS
Iron Saturation	<25.0%	Calculation
Moisture	≤4.5%	ADPI
Ash	≤2.0%	SMEDP 15.041
pH	5.2-7.2	SMEDP 15.022
<b>Physical Properties</b>		
Appearance	Cream/orange	Visual
Odor	Characteristic	Organoleptic
Taste	Characteristic	Organoleptic
Solubility	Good	Visual
<b>Microbiological</b>		
Standard Plate Count (SPC)	≤1,000 / gram	SMEDP 6.020
Coliforms	<10 / gram	SMEDP 7.030
E. coli	Negative	SMEDP 7.074
Yeast/Mold	≤10 / gram	SMEDP 8.111
Salmonella	Negative	ANSR/AOAC 2013.14
Listeria	Negative	ANSR/AOAC 2013.14
Enterobacteriaceae	≤50 / gram	SMEDP 7.090
Bacillus cereus	≤10 / gram	AOAC 980.31
Enterobacter sakazakii	Negative	PCR-BAX
Staphylococcus aureus	Negative	AOAC 2003.08
<b>Heavy Metals</b>		
Arsenic	≤1.00 ppm	ICP-MS
Lead	≤1.00 ppm	ICP-MS
Mercury	≤0.05 ppm	ICP-MS
Cadmium	≤0.05 ppm	ICP-MS

**Packaging:** LactoFerrin-95 (Bovine Lactoferrin Powder) is packaged in 4 kg heat-sealed PE bags. The standard pack is 2 x 4 kg bags in 8 kg box or 3 x 4 kg in 12 kg box.

**Storage:** Temperatures below 75°F, relative humidity below 65%, and an odor-free environment. Under proper storage conditions, the shelf life of this product is 24 months.

SPEC-0056 *Heidi Myers 3/1/19*  
 Reviewed/Approved: Heidi Myers, VP of Quality & Food Safety

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