



# United Dairymen of Arizona

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## Extra Grade Lactose Specification

**Description:** Lactose is the primary carbohydrate found in mammal's milk and is often referred to as milk sugar. Lactose is isolated from dairy products such as whey and whey permeate, which is available after production of cheese.

Parameter	Analysis	Method
pH	4.5 to 7.2	SMEDP 15.022
Protein	≤0.15%	FT-NIR/AOAC 991.20
Ash	≤0.30%	SMEDP 15.041
Total Moisture	≤5.50%	AOAC 925.45
Lactose	≥99.00%	Calculation
Color	White or slight yellow; free of tan/brown shades	Visual inspection
Mesh size	Unground, edible grade	Sieve
Flavor	No off flavors	Sensory evaluation
Aroma	No off odors	Sensory evaluation
Scorched Particles	7.5 to 15 mg (Disc A or B)	ADPI
Antibiotic / Pesticide Residue	Negative	Charm SL3/Gas Chromatography
Bulk Density	≤1.0 g/ml	USP
Microbiological		
Standard Plate Count (SPC)	≤5,000 / gram	SMEDP 6.020
Coliforms	<10 / gram	SMEDP 7.020
Yeast & Mold	<50 / gram	SMEDP 8.111
Salmonella	Negative	ANSR/AOAC 2013.14
E. coli	<10	SMEDP 7.074
Coagulase positive staph	Negative	AOAC 2003.08
Listeria	Negative	AOAC 2013.14

**Packaging:** 25 kg multiwall kraft bags with polyethylene inner liner or other approved closed container, i.e. "tote bags"

**Storage:** 24 months under proper storage conditions

SPEC-0012

Reviewed/Approved: Heidi Myers, VP of Quality & Food Safety

*Heidi Myers January 21, 2021*

Revised: January 21, 2021  
Supersedes: January 31, 2018