



**Foremost® NF Lactose**  
**Product Code 313**

**Description: Monohydrate, Crystalline, 325 mesh, Impalpable C**

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<b>CHEMICAL ANALYSIS</b>	<b>TYPICAL</b>	<b>SPECIFICATION</b>
Acidity or alkalinity	0.1 mL	0.4 mL of 0.1 N NaOH (maximum)
Clarity and color @ 400 nm	0.01	0.04 (maximum)
Heavy metals, µg/g	Less than 5.0	5.0 (maximum)
Loss on drying, %	0.2	0.5 (maximum)
Protein and light-absorbing impurities		
at 210-220 nm	0.05	0.25 (maximum)
at 270-300 nm	0.01	0.07 (maximum)
Residue on ignition, %	0.02	0.1 (maximum)
Specific rotation	+55.0° to +55.3°	+54.4° to +55.9°
Water, %	4.8 to 5.2	4.5 to 5.5
<b>MICROBIOLOGICAL STANDARDS</b>	<b>TYPICAL</b>	<b>SPECIFICATION</b>
Total aerobic microbial count	Less than 10 cfu/g	100 cfu/g (maximum)
<i>Escherichia coli</i>	Negative	Negative
Total combined molds and yeasts count	Less than 10 cfu/g	50 cfu/g (maximum)
<i>Staphylococcus aureus</i>	Negative	Negative
<i>Pseudomonas aeruginosa</i>	Negative	Negative
<i>Salmonella</i> species	Negative	Negative
<b>POWDER FINENESS (CUMULATIVE)</b>	<b>TYPICAL</b>	<b>SPECIFICATION</b>
On USS #200 (75 micron)	0.0-1.0 %	1.0 % (maximum)
On USS #325 (45 micron)	2.0-8.0 %	10.0 % (maximum)
On USS #400 (37 micron)	15-25 %	Not applicable
<b>PHYSICAL CHARACTERISTICS</b>		
Bulk Density	0.44 g/mL	0.35 g/mL (minimum)
Tapped Density	0.72g.mL	0.65 g/mL (minimum)
Appearance	White, crystalline powder	White, crystalline powder
Flavor and odor	Slightly sweet	Slightly sweet
<b>STORAGE CONDITIONS</b>	Protect from moisture and excessive heat.	

**ALLERGEN CLASSIFICATION**  
 Contains lactose, does not contain milk or whey proteins.

**CONFORMANCE**  
 NF Lactose monohydrate 313 conforms to the current versions of the NF/USP, EP, and JP monographs

*This information is presented in good faith but it is not warranted as to accuracy of results. Also, freedom from patent infringement is not inferred. This information is offered solely for your investigation, verification and consideration. (Mar 09)*