

**Certificate of Analysis  
(Representative Sample Certificate)**

**Product Name:** Hyaluronic acid  
**INCI Name:** Sodium Hyaluronate  
**CAS Number:** 9067-32-7  
**Lot Number:** Not available (data may vary slightly with different lots or batches)  
**Expiration Date:** 24 months from production date

Analytical Tests	Specifications	Results
Appearance/Color/Odor	White odorless crystalline powder	Corresponds
Protein	0.5 max at 280nm	0.04
Molecular Weight	800,000-1,500,000	1,320,000
Assay (colorimetric carbazole assay)	90.0% min on dry basis	99.5%
Glucuronic Acid	42-50%	48.1%
Loss on Drying	10.0% max	9.0%
pH value	5.0-7.5	6.9
Arsenic	1.0ppm max	0.06ppm
Cadmium	1.0ppm max	<0.01ppm
Lead	0.5ppm max	0.09ppm
Mercury	1.0ppm max	<0.01ppm
Residue on Ignition	20.0% max	16.5%
Mesh Size	60~200 mesh	100% thru 60
Bulk Density	0.10-0.40 g/ml	0.24 g/ml
Tap Density	0.20-0.50 g/ml	0.34 g/ml
Total Plate Count	1,000 cfu/g max	<10 cfu/g
Staphylococcus Aureus	Negative	Negative
E. Coli	Negative	Negative
Coliforms	<100 cfu/g	Pass
Salmonella	Negative	Negative
Yeast & Mold cfu/g	<100 cfu/g	<10 cfu/g

The above data were obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.

This report is not to be signed.

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