

Laboratory Nitta Gelatin India Limited, Gelatin Division, Quality Control Laboratory, Kusumagiri, P.O., Kakkanad, Kochi

Accreditation Standard ISO/IEC 17025: 2005

Discipline Chemical Testing **Issue Date** 24.11.2013

Certificate Number T-1934 **Valid Until** 23.11.2015

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
1. FOOD & AGRICULTURAL PRODUCTS				
1.	Collagen Peptide	Bulk Density	USP-36 NF-31(2013) Page No: 255 (616) Method 1 EP 7 th edition 2011: Page no: 306	0.1 to 1 g/ml
		pH	JIS K 6503: 2001 Page No: 12 EP 7 th edition: Page no: 2088 IP 2010 – Page No: 1406	4.0 to 10.00
		Moisture (Loss on drying)	EP 7 th edition 2011: Page no: 2088 &Page No: 51(2.2.32) JIS K 6503:2001 Page No: 2	1 to 20 %
		Arsenic	USP-36 NF-31(2013) Page No: 3009 & Page No: 2297(211)	Qualitative (Max 0.8 mg/kg)
		Heavy metals	USP-36 NF-31(2013) Page No: 3010 & Page No: 2299 (231) IP 2010 – Page No: 1406 & Page No: 80(2.3.13)	Qualitative (Max 50 mg/kg)
		Vitamin C Content	IP 2010 Page No:839	0.5 to 20 %
		Kjeldahl Nitrogen	IS 5719 : 2005	0.5 to 30 %

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2	Gelatin	Transmittance	JIS K 6503:2001 Page 12 (5.10)	5 to 100 %
		Jelly strength	IP 2010 Page No:1407 & Page No: 139 (2.4.18) EP 7 th edition 2011: Page no: 2088 JIS K 6503: 2001 Page No: 5	30 to 500 gms
		Viscosity	JIS K 6503: 2001 Page No: 3	20 to 88 mps
		Ash	IP 2010 – Page No: 1407 USP-36 NF-31(2013) Page No: 3009	0.05 to 10%
		Sulphur dioxide	EP 7 th edition 2011: Page no: 2088 & Page No: 145(2.5.29) IP 2010 – Page No: 1406	1 to 200 mg/kg
		Peroxide	EP 7 th edition 2011: Page no: 2088	Qualitative
		pH	EP 7 th edition 2011: Page no: 2088 IP 2010 – Page No: 1406 JIS K 6503:2001 Page No: 12	4 to 10
		Conductivity(1% solution)	EP 7 th edition 2011: Page no: 2088	1 to 1000 µS/cm
		Identification tests		
		1.Potassium dichromate test	USP-36 NF-31(2013) Page No: 3009	Qualitative test
		2.Tannic acid test	USP-36 NF-31(2013) Page No: 3009	Qualitative test
		3.Copper sulphate test	IP 2010 – Page No: 1406	Qualitative test
		4.Gelling test	IP 2010 – Page No: 1406 EP 7 th edition 2011: Page no: 2087	Qualitative test

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		Moisture (Loss on drying)	EP 7 th edition 2011: Page no: 2088 & Page No: 51(2.2.32) JIS K 6503:2001 Page No: 2 PAGI Method, 10th edn. 2006	1 to 20 %
		Iso electric point	PAGI Method, 10th Ed. 2006	4 to 10
		Fat content	JIS K 6503:2001 Page7	50 to 2000mg/kg
		Heavy metals	USP-36 NF-31(2013) Page No: 3010 & Page No: 2299(231) IP 2010 – Page No: 1406 & Page No: 80(2.3.13)	Qualitative (Max 50 mg/kg)
		Iron	EP 7 th edition 2011: Page no: 2088 & Page No: 38(2.2.24)	1 to 15 mg/kg
		Chromium	EP 7 th edition 2011: Page no: 2088 & Page No: 38(2.2.24)	0.1 to15 mg/kg
		Zinc	EP 7 th edition 2011: Page no: 2088 & Page No: 38(2.2.24)	0.1 to 2 mg/kg
		Cadmium	EP 7 th edition 2011: Page no: 2088 & Page No: 38(2.2.24)	0.1 to 3 mg/kg
		Copper	EP 7 th edition 2011: Page no: 2088 & Page No: 38(2.2.24)	0.1 to10 mg/kg
		Lead	EP 7 th edition 2011: Page no: 2088 & Page No: 38(2.2.24)	0.5 to 30 mg/kg

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Arsenic	USP-36 NF-31(2013) Page No: 3009 & Page No: 2297(211) IS: 3025 (Part 11)	Qualitative (Max 0.8 mg/kg)
II. WATER				
1.	Water Process Water & Drinking Water (Potable Water)	pH	IS3025(Part11):1983(RA-2002) APHA 22 nd Edition 2012 Part 4000, 4500-H ⁺ B Page 4-92	4 to 10
		Conductivity	IS: 3025 (Part 14):1984(RA-2002) APHA 22 nd Edition 2012 Part 2000, 2510 B Page 2-54	1 to 1000µS/cm
		Total Dissolved solids	IS: 3025 (Part 16):1984(RA-2002) APHA 22 nd Edition 2012 - Part 1000,1030-E Page 1-23	1 to 1000 mg/L
		Total Suspended solids	IS: 3025 (Part 17):1984(RA-2002) APHA 22 nd Edition 2012 - Part 2000,2540 D Page 2-66	1 to 500 mg/L
		Total Hardness	IS: 3025 (Part 21):1983(RA-2002) APHA 22 nd Edition 2012 - Part 2000,2340 C Page 2-44	0.5 to 500 mg/L
		Hardness due to Calcium	APHA 22 nd Edition 2012 - Part 3000,3500 Ca B Page 3-67	0.5 to 500 mg/L
		Acidity	IS: 3025 (Part 22):1986(RA-1998)	0.5 to 500 mg/L
		Alkalinity	IS: 3025 (Part 23):1986(RA-2003)	0.5 to 500 mg/L

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		Residual Chlorine	IS: 3025 (Part 26):1986(RA-1998) APHA 22 nd Edition 2012 - Part 4000, 4500-Cl B Page 4-60	0.04 to 5 mg/L
		Chloride	APHA 22 nd Edition 2012 -Part 4000,4500-Cl ⁻ B Page 4-72 IS: 3025 (Part 32):1988 (RA-1999)	0.35 to 500 mg/L

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