श्री गोगुन्दा गणपति नमः

VITAL EXTRACTSS

Suppliers of : Cold Pressed Oils | Essential Oils | Herbal Extracts (WS & OS) .

Analysis report of Nigelia Sativus (Kalonji/Black Seed) Oil

Batch no. : **KAL 01 / JUN 26**
Dt. of Mfg : **JUN 26**
Best before : **MAY 28**
Storage : **Keep airtight & store at dark & cool place**

Test	Limits	Protocol	Results
Description	Brown to deep brown liquid	Visual	Brown
Physico chemical analysis			
Moisture (% w/w)	Nmt 1%	IS 548- part -1	0.23
Free fatty acid (% w/w)	Nmt 25%	IS 548- part -1	19.37
Specific gravity	0.91 – 0.95	IS 548- part -1	0.93
Iodine value	120-145	IS 548- part -1	133
Sap. Value	180- 200	IS 548- part -1	195
Refractive index at 20C	1.470 – 1.473	IS 548- part -1	1.472
Acid value	Nmt 40	IS 548- part -1	36
Heavy metal analysis			
Lead	Nmt 10 ppm	AAS / ICP-ES	1.0 ppm
Cadmium	Nmt 1 ppm	AAS / ICP-ES	Not traceable
Arsenic	Nmt 1 ppm	AAS / ICP-ES	0.1 ppm
Microbiological analysis as per FIP Guidelines			
Total Viable Aerobic Count	< 10^4 cfu g-1	As per WHO/PHARMA/92. 559/Rev.1 Pg.49-52	< 120
Total Enterobacteriaceae	< 10^2 org g-1		< 20
Total Fungal Count	< 10^2 fs g-1		< 10
Test for Specific Pathogen As per FIP Guidelines			
E. coli (1g)	Absent	As per WHO/PHARMA/92. 559/Rev.1 Pg.49-52	Absent
Salmonella Sp. (10g)	Absent		Absent
S.aureus (1g)	Absent		Absent
Actives			
Fatty Acid Profile	Palmitic Acid	11 % -14 %	12.47
	Palmitoleic Acid	0.05 % - 0.5 %	0.10
	Stearic Acid	2 % -4 %	2.80
	Oleic Acid	17 % - 26 %	21.00
	Linoleic Acid	52 %- 67 %	62.27
	Linolenic Acid	0.1 % - 1 %	0.25
	Eicosadic Acid	0-3 %	0.85
	Myristic acid	0-0.5%	0.20
	Thymoquinene Content (%)	NLT 0.50%	0.51%