

### Quality Evaluation Laboratory, Spices Board, Cochin.

Details of the Analysis on various parameters showing the analytical charges, minimum quantity and number of days required for completion of analysis.

SI No.	Name of Analysis	Min. Qty. Reqd. in Gm	<sup>1</sup> Charges Rs.	<sup>10</sup> No of Days Required
1	Aerobic Spore Count	100	150	3
2	Agmark specifications	500	*	>
3	ASTA specifications	500 / 250X 10 Nos ***	*	1
4	Acid insoluble ash	250	250	3
5	Added Starch	100	300	2
6	Aflatoxin(B1,B2,G1,G2) [HPLC -METHOD]	250@	1500	3
7	Ochratoxin A [HPLC-METHOD]	250@	2000	5
8	Alcohol soluble extract	250	120	3
9	Bacillus cereus	100	350	5
10	Bulk density / Litre weight of spices	1000	100	1
11	Capsaicin - HPLC method (%/SHU)	100@	350	4
12	Chromate test (Qualitative)	100	100	2
13	Clostridium perfringens	100	500	5
14	Cold water soluble extract	100	120	4
15	Coliforms	100	220	4
16	Colour value (ASTA METHOD)	100@	180	3
17	Common salt	100	100	3
18	Crocine	10	180	2
19	Crude fibre	100	300	5
20	Curcumin (ASTA METHOD)	100@	250	3
21	Enterobacteriaceae	100	180	3
22	Excreta, mamalian	500/250	100	1
23	Excreta, others	500/250	100	1
24	Extraneous / foreign matter	500 / 250	100	1
25	E. coli	100	180	3
26	Filth, heavy	100	400	2
27	Filth, light	100 #	400	5
28	Gingerols and Shogaols	100 @	750	3
29	Heavy metals (Cd, Cr, Cu, Fe, Mg, Mo, Pb & Zn )	100@	120 ##	5
30	Heavy Metal : Arsenic	100	300	4
31	Heavy Metal : Mercury	100	300	4
32	Insect defiled / infested	500 / 250	100	1

Authorized By  
RBN

Page No  
1 of 4

Issue No.  
22

Issue Date  
1/3/2010

### Quality Evaluation Laboratory, Spices Board, Cochin.

Details of the Analysis on various parameters showing the analytical charges, minimum quantity and number of days required for completion of analysis.

SI No.	Name of Analysis	Min. Qty. Reqd. in Gm	<sup>1</sup> Charges Rs.	<sup>10</sup> No of Days Required
33	Light berries	250	100	1
34	Moisture (ASTA METHOD)	250	100	2
35	Mould (Microbiological)	100	120	5
36	Mould (Physical)	250	100	1
37	Non - volatile ether extract	100	150	6
38	Oleoresin (EDC extractables)	100	150	5
39	Organochlorine Pesticides Residues (Isomers of BHC, Endosulfan and DDT; Heptachlor, Aldrin, Dieldrin, Endrin and Endrin aldehyde)	200@	2000	6
40	Organochlorine Pesticide Residue - Dicofof	200@	800	6
41	Organophosphorous Pesticides Residues - (I) (Chlorpyrifos, Dimethoate, Disulfoton, Ethion, Methyl Parathion, Phorate, Parathion and Quinalphos)	200@	2000	6
42	Organophosphorus Pesticides Residues (II) (Methyl Pirimiphos, Phosalone, Monocrotophos)	200@	2000	6
43	Organophosphorus Pesticide Residues-III (Iprobenphos, Triazophos and Profenphos)	200@	2000	6
44	Pyrethroid Pesticides Residues (Cypermethrin and Fenvalerate)	200@	1000	6
45	Pesticide residues. single compound (any of the above)	200@	800	6
46	Malathion	100	800	7
47	Phorate	100	800	7
48	Etrimphos	100	800	7
49	Fenitrothion	100	800	7
50	Phosmet	100	800	7
51	Chlorfenvinphos	100	800	7
52	Parathion	100	800	7
53	Lambda Cyhalothrin	100	800	7
54	Chlorothalonil	100	800	7
55	Azinphos Ethyl	100	800	7
56	Picrocrocine	10	200	2
57	Piperine (ASTA METHOD)	100@	250	3
58	Safranal	10	180	2
59	Salmonella	100	420	6
60	Shigella	100	350	6

Authorized By  
RBN

Page No  
2 of 4

Issue No.  
22

Issue Date  
1/3/2010

### Quality Evaluation Laboratory, Spices Board, Cochin.

Details of the Analysis on various parameters showing the analytical charges, minimum quantity, and number of days required for completion of analysis.

SI No.	Name of Analysis	Min. Qty. Reqd. in Gm	<sup>1</sup> Charges Rs.	<sup>10</sup> No of Days Required
61	Starch	100	300	5
62	Staphylococcus aureus	100	420	5
63	Sudan - Dye (I,II,III & IV (HPLC METHOD))**	100	2000	2
64	Sudan - Dye (I,II,III & IV (LC-MS/MS METHOD))	100	2000	2
65	Sulphite Reducing Clostridia	100	600	5
66	Sulphur dioxide	200	300	4
67	Thermostable Bacteria	100	175	2
68	Total ash	100	150	3
69	Total plate count	100	150	2
70	USFDA specifications	500/250 X 10 nos **	*	6
71	Volatile oil	200@	100	3
72	Vanillin	30	250	3
73	Vanillic acid	30	250	3
74	P-Hydroxybenzoic acid	30	250	3
75	P-Hydroxybenzaldehyde	30	250	3
76	Synthetic Dyes II (Sudan Red 7b, Sudan Orange G, Para Red, Rhodamine B and Butter Yellow (LC-MS/MS METHOD))	100	2000	2
77	Synthetic Dyes II - Single compound (any of the above)	100	750	2
78	Sunset Yellow FCF in Sugar Coated Fennel	100	750	4
79	Water activity	100	250	2
80	Water soluble ash	100	200	4
81	Whole insects, dead (by count)	250	100	1
82	Yeast (Microbiological)	100	120	5
83	Yeast and Mould (Microbiological)	100	220	5

Authorized By  
RBN

Page No  
3 of 4

Issue No.  
22

Issue Date  
1/3/2010

### Quality Evaluation Laboratory, Spices Board, Cochin.

Details of the Analysis on various parameters showing the analytical charges, minimum quantity and number of days required for completion of analysis.

SI No.	Name of Analysis	Min. Qty. Reqd. in Gm	<sup>1</sup> Charges Rs.	<sup>10</sup> No of Days Required
--------	------------------	-----------------------	--------------------------	-----------------------------------

Note:-

1. Service tax @10% and Educational cess 3% (or as applicable) will be charged extra as per Government norms.
2. > Depends on the number of parameters for individual spices and number of samples.
3. \* Charges based on the parameter specified for each spice.
4. \*\*Turmeric is analysed for Sudan I-IV by HPLC Method unless otherwise specified.
5. \*\*\*In the case of analysis for ASTA / USFDA parameters, sample size should be a minimum of 500 g for heavier items like pepper, ginger, tumeric etc. and 250 g sample for low density items like chilli and seed spices.
6. # Quantity for light filth analysis for Tamarind concentrate by AOAC method should be a minimum of 600g.
7. ##Analytical charges Rs. 120/- per element
8. @ In the case of analysis of oleoresin samples of spices for the above parameters a minimum of 50 g sample size is required and in case of coriander and herbs a sample size of 300 g is required.
9. The days required for the analysis will increase depending on the inflow of samples for analysis.
10. No. of working days required for analysis

The samples may be sent to the Senior Scientist(QC), Quality Evaluation Laboratory, Spices Board, Sugandha Bhavan, Palarivattom, Cochin -682 025, along with analytical charges in the form of cash/D.D. drawn in favour of secretary, Spices Board.

<b>Authorized By</b> RBN	<b>Page No</b> 4 of 4	<b>Issue No.</b> 22	<b>Issue Date</b> 1/3/2010
-----------------------------	--------------------------	------------------------	-------------------------------

## QUALITY EVALUATION LABORATORY, SPICE BOARD COCHIN.

## TAILS OF THE ANALYSIS AND ANALYTICAL METHODS UNDER THE SCOPE OF ISO/IEC 17025

NAME OF ANALYSIS	STANDARD METHOD OR TECHNIQUE
ASTA SPECIFICATION	ASTA CLEANLINESS SPECIFICATIONS, 1999
ACID INSOLUBLE ASH	ASTA METHOD 4.0, 1997
AFLATOXIN (B1, B2, G1, G2)	ASTA METHOD 24.2, 1998
BACILLUS CEREUS	FDA BAM CHAPTER-14, 2001
CAPSAICIN	ASTA METHOD 21.3, 1997
CLOSTRIDIUM PERFRINGENS	FDA BAM CHAPTER -16, 2001
COLIFORMS	FDA BAM CHAPTER-4 2002
COLOR VALUE	
CURCUMIN	ASTA METHOD 20.1, 2004
E. COLI	ASTA METHOD 18.0, 2004
MOISTURE	EIC METHOD CHAPTER-2, 1982
OLEORESIN	ASTA METHOD 2.0, 1997
SALMONELLA	ASTA METHOD 11.0, 1997
STARCH	FDA BAM CHAPTER-5, 2003
STAPHYLOCOCCUS AUREUS	ASTA METHOD 8.0, 1997
SUDAN DYE I-IV	FDA BAM CHAPTER-12, 2001
SULPHUR DIOXIDE	E.C NOTIFICATION 03/99
PIPERINE	AOAC METHOD 990.23, 2000
TOTAL ASH	ASTA METHOD 12.1, 1997
TOTAL PLATE COUNT	ASTA METHOD 3.0, 1999
VOLATILE OIL	FDA BAM CHAPTER-3, 2001
VANILLIN	ASTA METHOD 5.0, 1997
YEAST AND MOULD	AOAC METHOD 990 25, 2000
	FDA BAM CHAPTER-18, 2001

SOP No:3.1

Issue no:1	Issue date 27.04.2004	Page 1 of 2
Amendment no:2	Amendment date:15.5.07	Issued by Quality Manager

UNCONTROLLED COPY

Form No.211

QUALITY EVALUATION LABORATORY, SPICE BOARD COCHIN.

DETAILS OF THE ANALYSIS AND ANALYTICAL METHODS UNDER THE SCOPE OF ISO/IEC 17025

24.	PESTICIDE RESIDUES:ORGANOCHLORINAE ALDRIN, BHC I,BHC II,BHC III DIELDRIN,ENDOSULPHAN, ENDOSULPHAN II ENDOSULPHAN SULPHATE ENDRIN ENDRIN ALDEHYDE HEPTACHLOR HEPTACHLOR EPOXIDE	USFDA PESTICIDE ANALYTICAL MANUAL
25.	PESTICIDE RESIDUES:ORGANOPHOSPHORUS METHYL PARATHION,CHLORPYRIPHOS,QUINALPHOS ETIION, TRIAZOPHOS,MONOCROTOPHOS,DIMETHOATE, IROBAENPHOS ,PROFENOFOS.	USFDA PESTICIDE ANALYTICAL MANUAL
26.	PESTICIDE RESIDUES :PYRETHROID CYPERMETRHRIN,FENVALERATE, ICYHALOTHRIN,DELTA METHRIN	USFDA PESTICIDE ANALYTICAL MANUAL

Note:Standard test methods other than listed above will also be accepted provided the same is feasible in the laboratory

Ref SOP No:3.1	Issue no:1	Issue date 27.04.2004	Page 2of2
	Amendment no:2	Amendment date:15.5.07	Issued by Quality Manager