

Laboratory **Olam Quality Control Laboratory, Olam Agro India Private Limited
9/102, Resurvey No. V/178, Varikoli P.O., Puthencruz, Ernakulam,
Kerala**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-7969**

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Validity **10.10.2018 to 09.10.2020**

Last Amended on --

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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BIOLOGICAL TESTING

I.	FOOD AND AGRICULTURAL PRODUCTS			
1.	Whole & Ground Spices, Herbs and Spice blends (Chillies, Turmeric, Coriander, Ginger, Black Pepper, Cumin, Fennel, Fenugreek, Nutmeg, White pepper, Cardamom, CloveThyme, Basil, Oregano, Parsley, Curry Powder)	Total Plate Count or Aerobic Plate Count	APHA Compendium 5 th Edition Chapter 8 Page No.95-101	≤10cfu/g
		Yeast & Mold (cfu/g)	APHA Compendium 5 th Edition Chapter 21 Page No. 277-279	≤10cfu/g
		Total Coliforms(MPN)	USFDA BAM September 2002 chapter 4	<3 MPN/g
		E.Coli (MPN)	USFDA BAM September 2002 chapter 4	<3 MPN/g
		Salmonella	USFDA BAM November 2011 Chapter 5	Presence/Absence in 25g/50g/375g

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<u>CHEMICAL TESTING</u>				
I.	FOOD AND AGRICULTURAL PRODUCTS			
1.	Whole & Ground Spices, Herbs and Spice blends (Chillies, Turmeric, Coriander, Ginger, Black Pepper, Cumin, Fennel, Fenugreek, Nutmeg, White pepper, Cardamom, Clove, Thyme, Basil, Oregano, Parsley, Curry Powder)	Moisture Content	ASTA Method 2.0 July 2011	1.0 % to 5.0 % 5.0% to 10 % 10 % to 25%
		Volatile Oil	ASTA Method 5.2 March 2010	0.5% to 2.0 % 2.0% to 6.0 % 6.0% to 10.0%
		Total Ash	ASTA Method 3.0 January 1997	0.1% to 5% 5.0% to 10% 10% to 15%
		Acid insoluble ash	ASTA Method 4.0 January 1997	0.1% to 0.5% 0.5% to 1% 1.0% to 1.5%
		Crude Fibre	ASTA Method 7.0 January 1997	10% to 15% 15% to 25% 25% to 35%
		Aflatoxin (B1, B2, G1, G2)	ASTA Method 24.2 January 1997	0.5 µg/kg to 5 µg/kg 5 µg/kg to 30 µg/kg 30 µg/kg to 50 µg/kg
		Ochratoxin A	SOP C8 Issue No: 1.0 Issue date: 05.03.2016 Revision date: 01.01.2018	5 µg/kg to 10 µg/kg 10 µg/kg to 20 µg/kg 20 µg/kg to 50 µg/kg
		Light Filth (Insect Fragments, Rodent Hairs, Whole Insects, Feather Barbules)	AOAC 975.49 & 970.66	0 to 500 Numbers/Unit Mass

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2.	Chillies	Capsaicin (Heat Value)	SOP C3 Issue No: 1.0 Issue date: 15/04/2014 Revision date: 01.01.2018	1000 SHU to 30000SHU 30000SHU to 70000SHU 70000 SHU to 20000SHU
		Extractable Colour	ASTA Method 20.1 October 2004	10 to 50 ASTA units 50 to 100 ASTA units 100 to 250 ASTA units
3.	Pepper	Piperine	AOAC 987.07 ASTA Method 12.1 April 14, 2018	0.2% to 2.0 % 2.0% to 5.0 % 5.0% to 8.0 %
4.	Turmeric	Curcumin	ASTA Method 18.0 October 2004	0.5% to 4.0 % 4.0 % to 8.0 % 8.0 %to 13.0%
5.	Whole & Ground Spices and Spice Blends	Ethion Profenofos Tebuconazole Bifenthrin Triazophos	SOP C12 Issue No 1 Issue date: 01.08.2017	0.01 mg/kg to 5mg/kg 0.01 mg/kg to 5mg/kg 0.01 mg/kg to 5mg/kg 0.01 mg/kg to 5mg/kg 0.01mg/kg to 5mg/kg