

Laboratory Central Institute of Fisheries Technology, Matsyapuri P.O., Willingdon Island, Cochin, Kerala

Accreditation Standard ISO/IEC 17025: 2005

Discipline Chemical Testing **Issue Date** 05.08.2014

Certificate Number T-1308 **Valid Until** 04.08.2016

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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
I. WATER				
1.	Ice / Water (Drinking water, Processing water and effluent water)	pH	APHA 2012 22 ^{ed} : 4-91-96	1 to 14
		Total Dissolved Solids	APHA 2012 22 ^{ed} ., 2.65	100 mg/L to 1000 mg/L
		Total Hardness	APHA 2012 22 ^{ed} :2.44-47	10 mg/L to 1000 mg/L
		Sulphate	USEPA, Method 300.1-1 (1997)	50 mg/L to 500 mg/L
		Fluoride		1.0 mg/L to 100 mg/L
		Chloride		100 mg/L to 1000 mg/L
		Nitrite		0.2 mg/L to 25 mg/L
		Nitrate		10 mg/L to 100 mg/L
		Boron	ISO 11885:2007 (E)	0.5 mg /L to 10 mg /L
		Nickel		10 µg/L to 100 µg/L
		Aluminium		0.15 mg/L to 1.0 mg/L
		Ammonium	ASTM, D6919-09, Volume 11.02,	0.4 mg/L to 10.0 mg/L
		Calcium	May 2011, water (II)	10 mg/L to 1000 mg/L
		Sodium		10 mg/L to 1000 mg/L
	Potassium		10 mg/L to 1000 mg/L	

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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
	Ice / Water (Drinking water, Processing water and effluent water)	α BHC	APHA 2012, 6630	0.1 μ g/L to 10 μ g/L
		β BHC		0.1 μ g/L to 10 μ g/L
		γ BHC		0.1 μ g/L to 10 μ g/L
		Heptachlor		0.1 μ g/L to 10 μ g/L
		Aldrin		0.1 μ g/L to 10 μ g/L
		Heptachlor epoxide		0.1 μ g/L to 10 μ g/L
		pp' DDE		0.1 μ g/L to 10 μ g/L
		Dieldrin		0.1 μ g/L to 10 μ g/L
		op DDD		0.1 μ g/L to 10 μ g/L
		Endrin		0.1 μ g/L to 10 μ g/L
		pp' DDD		0.1 μ g/L to 10 μ g/L
		Op DDT		0.1 μ g/L to 10 μ g/L
		pp DDT		0.1 μ g/L to 10 μ g/L

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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
	Ice /Water (Drinking water, Processing water and effluent water)	Copper	APHA 2012, 3020B, P 3- 39	0.03 mg/L to 10 mg/L
		Chromium		0.03 mg/L to 10 mg/L
		Zinc		0.45 mg/L to 10 mg/L
		Magnesium		1 mg/L to 40 mg/L
		Manganese		0.01 mg/L to 1.0 mg/L
		Lead		0.045 mg/L to 0.1 mg/L
		Cadmium		0.005 mg/L to 0.1mg/L
		Iron		0. 01 mg/L to 1.0 m /L
		Arsenic		0.005 mg/L to 1.0 mg/L
		Antimony		0.045 mg/L to 2.0 mg/L
		Tin		0.045 mg/L to 2.0 mg/L

II. FOODS & AGRICULTURAL PRODUCTS

1. Fish and Fishery products	Phosphate residue (as P2O5)	AOAC, 2005,18th Edition 995.11, Chapter 45, p.48	500 mg/kg to 10000 mg/kg
	Paralytic shellfish poison, PSP	AOAC, 2005,18th Edition 969.08, Chapter 49, p.80	Qualitative (Present / Absent)
	Copper	AOAC, 2012 990.08, 9.46	1.5 mg/kg to 50 mg/kg

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	Fish and Fishery products	Chromium	AOAC, 2012 990.08, 9.46	2.0 mg/kg to 50 mg/kg	
		Zinc		5.0 mg/kg to 100 mg/kg	
		Magnesium		5.0 mg/kg to 100 mg/kg	
		Manganese		1.0 mg/kg to 100 mg/kg	
		Lead		5.0 mg/kg to 50 mg/kg	
		Cadmium		0.1 mg/kg to 50 mg/kg	
		Iron		5 mg/kg to 400 mg/kg	
		Arsenic		3 mg/kg to 100 mg/kg	
		Tin		25 mg/kg to 100 mg/kg	
		Nickel		50 mg/kg to 100 mg/kg	
		Sodium		2 mg/kg to 1000 mg/kg	
		Calcium		2 mg/kg to 1000 mg/kg	
		Potassium		2 mg/kg to 10000 mg/kg	
		α BHC		AOAC-2012 QuEChERS Method	30 µg/kg to 200 µg/kg
		β BHC			30 µg/kg to 200 µg/kg
		γ BHC			30 µg/kg to 200 µg/kg
	Heptachlor	30 µg/kg to 200 µg/kg			
	Aldrin	30 µg/kg to 200 µg/kg			
	Heptachlor epoxide	30 µg/kg to 200 µg/kg			
	pp' DDE	30 µg/kg to 200 µg/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
	Fish and Fishery products	Dieldrin	AOAC-2012 QuEChERS Method	30 µg/kg to 200 µg/kg
		op DDD		30 µg/kg to 200 µg/kg
		Endrin		30 µg/kg to 200 µg/kg
		pp' DDD		30 µg/kg to 200 µg/kg
		op DDT		30 µg/kg to 200 µg/kg
		pp DDT		30 µg/kg to 200 µg/kg
		3-amino 2 oxazolidinone (AOZ)	USFDA, 2004, April 1, 2004,P1-8	1.0 µg/kg to 50 µg/kg
		Semicarbazide (SC)		1.0 µg/kg to 50 µg/kg
		3-amino-5-morpholinomethyl-2-oxazolidone (AMOZ) 5 methylmorpholino 3 amino 2 Oxazodilinone (AMOZ)		1.0 µg/kg to 50 µg/kg
		Copper	AOAC, 2012 990.08, 9.46	1.5 mg/kg to 50 mg/kg
		Chromium		2.0 mg/kg to 50 mg/kg
		Zinc		5.0 mg/kg to 100 mg/kg
		Magnesium		5.0 mg/kg to 100 mg/kg
		Manganese		1.0 mg/kg to 100 mg/kg
	Lead		5.0 mg/kg to 50 mg/kg	

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	Fish and Fishery products	Cadmium	AOAC, 2012 990.08, 9.46	0.1 mg/kg to 50 mg/kg
		Iron		5.0 mg/kg to 400 mg/kg
		Arsenic		3.0 mg/kg to 100 mg/kg
		Tin		1.5 mg/kg to 100 mg/kg
		Moisture	AOAC Official Methods (2012) 950.46, Chapter 39.P.1.	0.1 g % to 100g %
		Protein	AOAC Official Methods (2012) 2001.11, Chap. 4. P. 33	0.5 % to 50 %
		Fat	AOAC Official Methods (2012) 991.36, Chap. 35.P. 3	0.1 g % to 30 g %
		Ash	AOAC Official Methods (2012) 938.08,Chapter 35.P.8.	0.01 g % to 100g %
		pH	IS:1060, Part 1; 1966	1 to14
		Carbohydrate	SOP for determination of Carbohydrate in fish DOC:CIFT/FP/SOP/006	0.1 g to 10 g/100g

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	Fish and Fishery products	Histamine in fish and shellfish	SOP for determination of Histamine DOC:CIFT/FP/SOP/009	10 mg/ kg to 200 mg/ kg
		Viscosity	AOAC Official Methods (2012) 935.35, Chapter 32. P.26	20 CP to 2 M

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