

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	1 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	FOODS & AGRICULTURAL PRODUCTS			
1.	Cereals, Pulses & by-Products	Refractions	IS 4333-Part 1 (1996) (Reaffirmed 2008) / IS 10768 (1984) (Reaffirmed 2005)	0 to 20% (m/m)
		Detection of Hectolitre Weight	IS 4333-Part 3 (2002) (Reaffirmed 2008) / ISO-7971-2 (1995)	60-90 kg/hl
		Moisture	IS 4333-Part 2 (2002) (Reaffirmed 2008) / IS 1009 (1979) (Reaffirmed 2005)/ IS 1155 (1968) (Reaffirmed 2005) / AOAC 925.10(18 th Edition) / ISO 712 (1998)	1 -20%(m/m)
		Ash	IS 1155 (1968) (Reaffirmed 2005)/ IS 1009 (1979) (Reaffirmed 2005) / AOAC 923.03 (18 th Edition)	0.2-10%(m/m)
		Acid Insoluble Ash	IS 1009 (1979) (Reaffirmed 2005) / IS 1155 (1968) (Reaffirmed 2005)	0.1-2.0 %(m/m)
		Wet Gluten	IS 8162-1998(Reaffirmed 2003)/ ISO 5531:1978 / GAFTA-130 (34.0)	20-40%(m/m)
		Dry Gluten	IS 1009 (1979) (Reaffirmed 2005)/ IS 1155 (1968) (Reaffirmed 2005)	5-20%(m/m)
		Protein / Crude Protein	AOAC 920.87 (18 th Edition) /	5-20%(m/m)
		Alcoholic Acidity	IS 1009 (1979) (Reaffirmed 2005)/ IS 1155 (1968) (Reaffirmed 2005)	0.01 – 1.0% (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	2 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Wheat Sedimentation Index / Value	IS 13864 (Reaffirmed 2005) / ISO 5529 (1992) /	10-30 ml
		Aflatoxin (TLC)	IS 13427(1992) (Reaffirmed 2008) / ISO 6651 (1987) / GAFTA-130 (24:2)	≤10ppb (Limit test)
		Aflatoxin (HPLC)	AOAC – 990.33(18 th Edition) /	0.5– 200 µg/kg
		Uric Acid	IS 4333 Part 5(1970) (Reaffirmed 2005)	6 – 100 mg/100g
		Crude Fibre	IS 1155 (1968) (Reaffirmed 2005) / IS 2239 (1971) (Reaffirmed 2004)	0.1 – 10.0 % (m/m)
2.	Animal Feeds (Extractions/ De-Oiled Cakes)	Moisture	GAFTA 130 (2:1) / IS 7874 (1975) (Part 1) (Reaffirmed 2004) / AOAC 930.15 (18 th Edition)	5 – 20 % (m/m)
		Protein & Crude Protein	GAFTA 130 (4.0)/ IS 7874 (1975) (Part 1) (Reaffirmed 2004) / AOAC 2001.11 (18 th Edition)	20 – 70% (m/m)
		Oil	GAFTA 130 (3.0)/ IS 7874 (1975)(Part 1)	0.1– 25 % (m/m)
		Crude Fiber	GAFTA -130 (10:0)/ IS 7874 (1975)(Part 1) (Reaffirmed 2004) / IS 2052(2009)	1 – 40 % (m/m)
		Ash	GAFTA 130 (12.0)/ IS 7874 (1975)(Part 1) (Reaffirmed 2004) / AOAC 942.05 (18 th Edition)	1 – 25 % (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	3 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Acid Insoluble Ash/ Sand & Silica	GAFTA- 130 (13:0) / IS 7874 (1975)(Part 1) (Reaffirmed 2004)	0.1 – 10 % (m/m)
		Urease Activity	GAFTA 130 (27.0)	0.1 – 2.0 mgN/g/min. at 30°C
		Aflatoxin (TLC)	IS 13427-1992(Reaffirmed 2008)/ ISO 6651(1987)/ GAFTA-130(24:2)	≤10 ppb (Limit Test)
		Calcium	GAFTA-130 (16:1) / AOAC 18 th Edition / IS 7874 (1975) (Part II) (Reaffirmed 2004)	0.1 – 10% (m/m)
		Phosphorous	GAFTA 130 (9.0)/	0.1– 5 % (m/m)
		Ammoniacal Nitrogen	IS 7874 (1975)(Part I) (Reaffirmed 2004) AOAC 967.07 18 th Edition	0.1 – 5.0 %(m/m)
		Urea	GAFTA 130(6:0)	0.1 – 5% (m/m)
3.	Sugar and by Products			
a.	Raw Sugar	Polarization	ICUMSA GS 1/2/3/9-1 (2011) / IS 15279 (2003) (Reaffirmed 2008)	70.0 – 99.9 %(m/m)
		Moisture	ICUMSA GS2/1/3/9-15 (2007) (Amended) IS 15279 (2003) (Reaffirmed 2008)	0.04 – 5.0 % (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	4 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Sulphated Ash	ICUMSA GS1-10 (Amended) (1998) / IS 15279 (2003) (Reaffirmed 2008)	0.01 – 1.0 % (m/m)
		Colour	ICUMSA GS1/3 – 7 (2011) / ICUMSA GS 9/1/2/3 – 8 (2011)	400 – 5000 Units
		Reducing Sugar	ICUMSA GS1/3/7-3 (2005)/ ICUMSA GS 1-5 (2009)	0.1 – 10% (m/m)
		Dextran	ICUMSA GS 1/2/9-15(2011)	10 – 800 mg/kg
		Conductivity Ash	ICUMSA GS 1/3/4/7/8-13 (1994) / IS 15279 (2003) (Reaffirmed 2008)	0.1 – 1.5 %(m/m)
		Starch	ICUMSA GS 1-16	50 – 200 mg/kg
b.	Refined Sugar	Polarization	ICUMSA GS 2/3-1 (2011) / IS 15279 (2003) (Reaffirmed 2008)	95.0 - 99.9 % (m/m)
		Moisture	ICUMSA GS 2/1/3/9-15 (2007) / IS 15279 (2003) (Reaffirmed 2008)	0.02 – 1.0 %(m/m)
		ICUMSA Colour	ICUMSA GS 2/3-9 (2005) / GS 2/3-10 (2011) / GS 9/1/2/3-8 (2011) / IS 15279 (2003) (Reaffirmed 2008)	20-350 units
		Calcium	ICUMSA GS 8/2/3/4-9 (2000)	0.001 – 0.5 %(m/m)
		Sulphite by Colorimetry	ICUMSA GS 2/1/7-33 (2011) / IS 15279 (2003) (Reaffirmed 2008)	1 – 100mg/kg

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	5 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Insoluble Matter	ICUMSA GS 2/3/9-19 (2007) / IS 15279 (2003) (Reaffirmed 2008)	0.005 – 0.1 %(m/m)
		Reducing Sugar	ICUMSA GS 2/3/9-5 (2011) / ICUMSA GS 2/9-6 (2011) / IS – 15279 (2003) (Reaffirmed 2008)	0.002 – 0.05 %(m/m)
		Conductivity Ash	ICUMSA GS 2/3/9 – 17 (2011) / IS – 15279 (2003) (Reaffirmed 2008)	0.005 – 1.01 %(m/m)
		Sulphated Ash	IS 15279 (2003) (Reaffirmed 2008)	0.01 – 0.1% (m/m)
		Copper	ICUMSA GS 2/3 –29	0.5 – 10 mg/kg
		Iron	ICUMSA GS 2/3/7/8 – 31	0.5 – 10 mg/kg
4.	Molasses	Total Reducing Sugar / Reducing Sugars	GAFTA 130 (2003) ICUMSA GS 4/3-7(2011), ICUMSA GS 4/3-9(2011)	30 – 70 % (m/m)
		Sucrose	GAFTA 130 (11:2)	20 – 50 % (m/m)
		Refractometric Dry Substance (RDS %)	ICUMSA GS 4 /3/8 - 13 (2009)	70 – 90%(m/m)
		Apparent Dry Substance	ICUMSA GS 4 – 15 (1994)	70 – 90 %(m/m)
		Sulphated Ash	ICUMSA GS1/3/4/7/8-11 (2000)	2.0 – 20.0 % (m/m)
		Unfermentable Sugar	AOAC 18 th Ed.-948.23	40 – 50 % (m/m)
		Moisture	GAFTA 130(2:4)	15 – 30% (m / m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	6 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
5.	Jaggery (Gur)	Sucrose	IS 1152 (2003) (Reaffirmed 2008) / IS 15279 (2003) (Reaffirmed 2008)	70 – 90 % (m/m)
		Reducing Sugar	IS 5982 (2003) (Reaffirmed 2008) / IS 15279 (2003) (Reaffirmed 2008)	5 – 25 % (m/m)
		Moisture	IS 5982 (2003) (Reaffirmed 2008) / IS 15279 (2003) (Reaffirmed 2008)	5 – 15 % (m/m)
		Water Insoluble Matter	IS 5982 (2003) (Reaffirmed 2008)	0.5 – 4 % (m/m)
		Sulphated Ash	IS 1679 (Reaffirmed 1999)	1 – 6 % (m/m)
		Ash Insoluble in dilute HCL	IS – 12923 (1990) (Reaffirmed 2008)	0.01 – 1.0 % (m/m)
6.	Oil seeds & by-Products	Moisture	IS 3579 (1966) (Reaffirmed 2006) /	4 – 12% (m/m)
		Oil Content	IS 3579 (1966) (Reaffirmed 2006) / FOSFA (2005)	15 – 65% (m/m)
		FFA of Extracted Oil	IS 3579 (1966) (Reaffirmed 2006)	0.2 – 10%(m/m)
		Aflatoxin (TLC)	IS 13427 (1992) (Reaffirmed 2008) / ISO 6651 (1987) / GAFTA-130(24:2)	≤10ppb (Limit test)
		Aflatoxin (HPLC)	AOAC – 990.33(18 th Edition /	0.5– 200 µg/kg
		Foreign Matter	IS 3579 (1966) (Reaffirmed 2006)	0 – 10 % (m/m)
		Refraction	IS 3579 (1966) (Reaffirmed 2006)	0 – 10 % (m/m)
		Admixture	IS 3579 (1966) (Reaffirmed 2006)	0 – 10 % (m/m)
		Counts / Ounce avoirdupois	FOSFA (2010)	30 – 150 counts

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	7 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
7.	Oils, Fats & related products	Moisture & Volatile Matter	AOCS Ca 2c – 25 (1997) IS 548 (1964) (Reaffirmed 2006) ISO 662 (1998)	0.01 – 1.0 % (m/m)
		Free Fatty Acid (FFA)	AOCS Ca 5a – 40 (1997) IS 548 (1964) (Reaffirmed 2006) ISO – 660 (1996)	0.02 – 10.0 % (m/m)
		Saponification Value	AOCS Cd 3-25 (1997) / ASTM D 9493 / IS – 548 (1964) (Reaffirmed 2006)	150 – 260 mgKOH/g
		Unsaponification Value	IS 548 (1964) (Reaffirmed 2006) AOCS Ca 6b-53 (1997)	0.1 – 5% (m/m)
		Iodine Value	IS 548 (1964) (Reaffirmed 2006) AOCS Cd 1d-92 (1997) / ISO 3961(1996) / IP 84 / 93	2 – 350 units
		Refractive Index	AOCS Cc 7-25 (1997) / IS 548 (1964) (Reaffirmed 2006)	1.300 – 1.700
		Specific Gravity / Density	IS 548 (1964) (Reaffirmed 2006) AOCS To 1b-64 / AOCS Cc 10c-95 (1997) / ISO 6883 (2000)	0.8000 – 1.0000
		Colour	IS 548 (1964) (Reaffirmed 2006) AOCS Cc 13e-92 (1997) ISO 15305 (1998)	0.1 – 30 R 1 – 100 Y
		Hydroxyl Value / Acetyl Value	AOCS Cd 4-40 (1999) / IS – 548 (1964) (Reaffirmed 2006)	150 – 170 units

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	8 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Viscosity (Brookfield)	AOCS Ja 10-87 (1997)	6.3 – 10 st
		Insoluble Impurities	AOCS Ca 3a-46 (1997) IS – 548 (1964) (Reaffirmed 2006) ISO 663 (2000)	0.005 – 0.5% (m/m)
		Acid Value	IS 548 (1964) (Reaffirmed 2006) / AOCS cd 3d-63 (1997) / ISO 660 (1996)	0.04 – 20 mgKOH/g
		Peroxide Value	AOCS Cd 8-53 (2003) IS – 548 (1964) (Reaffirmed 2006) / ISO 3960 (2001)	0.5 – 15 meq/Kg
		Flash Point	AOCS Cc 9c-95 (1997)/ ISO 15267 (1998)	120 – 300°C
		Lecithin (as P and Phosphatide)	AOCS Ca 12-55 (1997)	20 – 300mg/kg
		Cloud Point	AOCS Cc 6-25 (1997)	5 – 30°C
		Melting Point / Slip Point	IS 548 (1964) (Reaffirmed 2006) / AOCS Cc 1-25 (1997) / AOCS Cc 3-25 (1997) / ISO 6321(2002)	15 – 50°C
		Titer	AOCS Cc 12-59 (1997)	25 – 50 units
		Fatty Acid Composition	AOCS Ce-1e-91 / AOCS Ce-2-66 / IS 548 (III) / ISO 5508 / ISO 5509	0.05 – 100% (m/m)
		Determination of carotene in vegetable oil	BS: 684 Sec 2.20: 1977	300 – 600 mg/kg

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	9 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Break Test	AOCS Ca 10-40	0.01-0.2% m/m
		Cold Test	AOCS Cc 11-53	Qualitative
		Conjugated Dienoic Acid	AOCS Ti 1a - 64	25-40%(m/m)
		Purity Test:		
		1.Baudouin Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		2.Halphen Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		3.Hexabromide Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		4.Argemone Oil Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		5.Hydrocyanic Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		6.Mineral Oil Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		7.Bellier Turbidity Temperature Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		8.Castor Oil Test	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative
		9.Phytosterol Acetate Melting Point Test(Animal Fat)	IS 548 : Part II(1976) (Reaffirmed 2006)	Qualitative

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	10 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
8.	Spices and Condiments	Moisture (Water)	IS 1797 (1985) (Reaffirmed 2003) /	4 to 25% (v/m)
		Refractions such as foreign matter, filth etc.	IS 1797 (1985) (Reaffirmed 2003) /	0 - 10% (m/m)
		T/ Ash, W/S Ash, Acid Insoluble Ash	IS 1797 (1985) (Reaffirmed 2003) /	1 - 10% (m/m)
		Alcohol extract, Water extract, Non Volatile Ether extract	IS 1797 (1985) (Reaffirmed 2003) /	1 - 15% (m/m)
		Volatile Oil	IS 1797 (1985) (Reaffirmed 2003) /	0.1 - 10.0% (v/m)
		Curcumin Content in Turmeric	IS 3576 (2010) (Reaffirmed 2003) / IS 10925 (1984) (Reaffirmed 2007)	0.5 - 5% (m/m)
		Determination of Colour Value in Chilli powder / Chilli Oleoresin	IS 13663 (1993) (Reaffirmed 2007)	1000 - 20000 Color Units
		Capsaicin	AOAC 18 ^h Edition 995.03 (HPLC)	0.01 – 1.0 % (m/m)
9.	Milk Powder	Moisture	IS 11623 (2008)	1 – 10 % (m/m)
		Milk Fat	IS 11721(2005) / ISO 1736 (1985)	0.1 – 3 0% (m/m)
		Total Ash	IS 1479 (1960) (Reaffirmed 2003)/ IS 1165 (2002) (Reaffirmed 2007)/ IS 14433 (2007)	0.1 – 10 % (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	11 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
		Titratable Acidity as lactic Acid	IS 11765 (1986) (Reaffirmed 2003)/ IS 1165 (2002) (Reaffirmed 2007) / ISO 6091 (1980)/ IS 11766 (1986) (Reaffirmed 2003)/ ISO 6092 (1980)	0.01 –15 (m/m)
		Protein	IS 1479 (1960) (Reaffirmed 2003)/ IS 7219(1973) (Reaffirmed 2005) /	1 – 35 % (m/m)
		Lactose	IS 1479 (1960) (Reaffirmed 2003)	10 – 75 % (m/m)
10.	Starch	Moisture	IS 4706 (1978) (Reaffirmed 2005)	5– 20 % (m/m)
		Ash	IS 4706 (1978) (Reaffirmed 2005)	0.1 -1.0 % (m/m)
		Acid insoluble ash	IS 4706 (1978) (Reaffirmed 2005)	0.1 – 0.3% (m/m)
		Starch	IS 4706 (1978) (Reaffirmed 2005)	90 – 99 % (m/m)
		pH	IS 4706 (1978) (Reaffirmed 2005)	4.5 - 7.0
		Protein	IS 4706 (1978) (Reaffirmed 2005)	0.1 – 1.0 % (m/m)
		Crude Fibre	IS 4706 (1978) (Reaffirmed 2005)	0.1 – 0.5 % (m/m)
		Alcoholic Acidity	IS 4706 (1978) (Reaffirmed 2005)	0.01 – 1.0 % (m/m)
		Chloride	IS 4706 (1978) (Reaffirmed 2005)	0.002 – 0.01 % (m/m)
11.	Bakery and confectionery products (Biscuits)	Moisture	IS 12711 (1989) (Reaffirmed 2005)	1 – 10% (m/m)
		Total Ash	IS 12711 (1989) (Reaffirmed 2005)	1 – 3% (m/m)
		Acid insoluble ash	IS 12711 (1989) (Reaffirmed 2005)	0.01 – 0.1% (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	12 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
12.	Honey & Honey Products	Fat	IS 12711 (1989) (Reaffirmed 2005)	5 – 40% (m/m)
		Acidity of extracted Fat	IS 12711 (1989) (Reaffirmed 2005)	0.1 – 1% (m/m)
		pH of aqueous extract	IS 12711 (1989) (Reaffirmed 2005)	4 – 9
		Crude Fibre	IS 12711 (1989) (Reaffirmed 2005)	0.1 – 2% (m/m)
		Alcoholic Acidity	IS 12711 (1989) (Reaffirmed 2005)	0.1 – 0.5% (m/m)
		Protein	IS 7219 (1973) (Reaffirmed 2005)	5 – 15% (m/m)
		Acidity	AOAC 962.19	10 - 30 meq/Kg
		Color	AOAC 985.25	Light Amber to Amber
		Fructose/Glucose	AOAC 954.11	1-1.2
		Mineral substances as Ash	AOAC 920.181	0.1- 0.5 % (m/m)
		Moisture	AOAC 969.38	2– 20 % (m/m)
		Reducing Sugar	AOAC 920.183	60 – 80 % (m/m)
		Specific Gravity	AOCS – To 1b 64	1.3 – 1.4
		Sucrose	AOAC 920.184	0.2 – 5 % (m/m)
13.	Fish & Fishery Products (Fish Meal & Fish Oil)	Ash	GAFTA – 130 (12 : 0)	10 – 30 % (m/m)
		pH of 1 % or 10% aqueous solution	pH meter	6 – 7
		Sulphite	AOAC 961.09	Qualitative
		Total Phosphate (as P ₂ O ₅)	AOAC 964.06	1 – 5 % (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	13 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
	Fish & Fishery Products (Fish Meal & Fish Oil)	Protein	GAFTA 130 (4 : 0)	50 – 70 % (m/m)
		Moisture	GAFTA 130 (2 : 1)	4 – 20 % (m/m)
		Fat	AOAC 948.16	5 – 15 % (m/m)
		Salt	AOAC 937.09	0.5 – 2 % (m/m)
		Sand	GAFTA 130 (13 : 0)	0.5 – 5.0 % (m/m)
		TVN	AOAC 999.01	100 – 400 mgN/100g
		FFA	AOCS Ca-5a-40	1 – 12 % (m/m)
		Histamine	AOAC 957.07	50 - 500 ppm
		Melamine	HPLC	2.0 – 10mg/Kg
		Antioxidant – Ethoxyquin	AOAC 996.13	10 – 300 mg/kg
		Impurities	AOCS Ca-3a-46	0.05 -0.25 % (m/m)
		Iodine Value	AOCS Cd-1d-92	150 – 170
		EPA / DHA	AOCS Ce-1b-89	10 –35 % (m/m)
		Unsaponifiable matter	AOCS Ca-6b-53	0.5 – 2.5 % (m/m)
		Acid Value	AOCS Cd-3d-63	1 – 24 mgKOH/g
		Peroxide Value	AOCS Cd-8-53	1 – 5 meq/Kg

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	14 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
II. FERTILIZERS				
	(Nitrogenous/ NPK Fertilizers)	Moisture (Oven and Vacuum Oven)	AOAC 18 th Edn. ,950.01 & 965.08/ IS 6092 (1985) (Reaffirmed 2000)	0.1 – 12 % (m/m)
		Moisture (Karl Fischer)	AOAC 18 th Edn., 972.01 / IS 6092 (1985) (Reaffirmed 2000)	0.1 – 12 % (m/m)
		T/ Nitrogen (Including / Excluding Nitrate N)	AOAC 18 th Edn. 978.02/ IS 6092 (2004) / ISO 5315	5 – 48 % (m/m)
	Phosphatic Fertilizers & NPK Fertilizers	T/ P ₂ O ₅ (Gravimetry)	AOAC 18 th Edn., 962.02 / IS 6092 (2004) (Reaffirmed 2006)/ ISO 6598	5 – 55 % (m/m)
		Potash Fertilizers & NPK Fertilizers	Potassium as (K ₂ O)	IS 6092 (1985) (Reaffirmed 2001) (Flame Photometry)
				0.5 – 65 % (m/m)
III. ORES & MINERAL				
1.	Iron Ore	Silica	IS 1493 (1981) (Part I) (Reaffirmed 2006)	0.5 – 20.0 % (m/m)
		Iron Oxide	IS 1493 (1981) (Part I) (Reaffirmed 2006)	55 – 95 % (m/m)
		Phosphorous	IS 1493 (1981) (Part I) (Reaffirmed 2006)	Upto 0.2 % (m/m)
		Sulphur	IS 1493 (1981) (Part I) (Reaffirmed 2006)	Upto 0.2 % (m/m)
		Alumina	IS 1493 (1981) (Part I) (Reaffirmed 2006)	0.05 – 10.0 % (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	15 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
2.	Bauxite	Loss on Ignition	IS 2000 (1985) (Part I) (Reaffirmed 2006)	5 – 30 % (m/m)
		Silica	IS 2000 (1985) (Part II) (Reaffirmed 2006)	0.5 – 10.0 % (m/m)
		Alumina	IS 2000 (1985) (Part III) (Reaffirmed 2006)	12-90 % (m/m)
		Iron Oxide	IS 2000 (1985) (Part IV) (Reaffirmed 2006)	5-40 % (m/m)
		Titanium	IS 2000 (1985) (Part V) (Reaffirmed 2006)	0.5 – 10 % (m/m)
3.	Lime Stone & Dolomite	Loss on Ignition	IS 1760 (1991) (Part I) (Reaffirmed 2006)	10 to 50 % (m/m)
		Silica	IS 1760 (1991) (Part II) (Reaffirmed 2006)	0.5-25.0 % (m/m)
		Alumina	IS 1760 (1991) (Part III) (Reaffirmed 2006)	0.5 –5.0 % (m/m)
		Lime as CaO	IS 1760 (1991) (Part III) (Reaffirmed 2006)	20 – 60 % (m/m)
		Magnesium as MgO	IS 1760 (1991) (Part III) (Reaffirmed 2006)	0.5 – 35 % (m/m)
		Iron Oxide	IS 1760 (1991) (Part III) (Reaffirmed 2006)	0.1 – 5.0 % (m/m)

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	16 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
IV.	WATER			
1.	(Potable and Domestic / Waste Water/ Bore Water)	pH	IS 3025 (1983) – Part 11 (Reaffirmed 2006)	1 –14
		Total Hardness	IS 3025 (2009)- Part 21 (Reaffirmed 2006)	1 – 500 mgpl CaCO ₃
		Calcium Hardness	IS 3025 (2009)- Part 21 (Reaffirmed 2006)	1– 500mgpl CaCO ₃
		Magnesium Hardness	IS 3025 (2009)- Part 21 (Reaffirmed 2006)	1 – 500mgpl CaCO ₃
		Chlorides (Argentometric method)	IS 3025 (1988)- Part 32 (Reaffirmed 1999)	1– 500mgpl
		Sulphates (Gravimetric method)	IS 3025 (1986)-Part 24 (Reaffirmed 2003)	1 – 200 mgpl
		Total Dissolved Solids	IS 3025 (1984) – Part 15 (Reaffirmed 2005)	1 – 500 mgpl
		Suspended Solids	IS 3025 (1984) – Part 15 (Reaffirmed 2003)	1 – 500 mgpl
		Acidity	IS 3025 (1986) – Part 22 (Reaffirmed 2003)	1 – 500 mgpl as CaCO ₃
		Alkalinity	IS 3025 (1986) – Part 23 (Reaffirmed 2003)	1 – 500 mgpl as CaCO ₃
		Conductivity	IS 3025 (1984)- Part No.14 (Reaffirmed 2006)	2-500 mohs

Laboratory	RCA Laboratories, 501/502, Milan Industrial Estate, Abhudaya Nagar, Cotton Green, Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Chemical Testing	Issue Date	31.01.2014
Certificate Number	T-0755	Valid Until	30.01.2016
Last Amended on	-	Page	17 of 17

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
--------------	-----------------------------------	--------------------------------	--	---

V. COAL, COKE& OTHER SOLID FUELS

1.	Coal / Coke	Proximate Analysis		
		Moisture (air dry basis)	IS: 1350(1984) - Part 1 ISO: 589 (2008-11-01) ASTM: D 3173(2003) (Re-approved - 2008) ISO: 11722 (1999-05-01)	0.5– 20%(m / m)
		Ash (air dry basis)	IS: 1350(1984) - Part 1 ISO: 1171 (2010-06-15)	1 – 30%(m / m)
		Volatile Matter (air dry basis)	IS: 1350(1984) - Part 1 ASTM D 3175(2007) ISO: 562 (2010-06-15)	0.1– 40%(m / m)
		Fixed Carbon (air dry basis)	ISO:17246 (2010-06-15) IS: 1350(1984) - Part 1	By Calculation
		Gross Calorific Value (air dry basis)	IS: 1350(1970) - Part 2 (Reaffirmed 1994) ASTM D 5865-10a	2500 – 8000Kcal /kg
		Sulphur (air dry basis)	IS: 1350(1969) – Part 3 (Reaffirmed 1994)	0.1 – 1.0%(m / m)

-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-