Laboratory			Regional Agmark Laboratory (RAL), B3, A & B, Rajaji Bhavan, C.G.O. Complex, Besant Nagar, Chennai, Tamil Nadu				
Acc	reditation Standar	d ISO/IEC 17025: 2005					
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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed		ge of Testing / ts of Detection		
1.	FOOD & AGRICU	LTURAL PRODUCTS					
1.	Oil, Fats and Relate	d Products					
a.	Mustard Oil	Moisture Content	IS 548 (Part I): 1964 (RA 20 Clause 5.1	10) 0.05	5 % to 0.40 %		
		Specific gravity at 30°C/30°C	IS 548 (Part I): 1964 (RA 20 Clause 11.3	10) 0.90	05 to 0.915		
		Refractive Index @40°C	IS 548 (Part I): 1964 (RA 20 Clause 10	10) 1.40	530 to 1.4670		
		Saponification value	IS 548 (Part I): 1964 (RA 20 Clause 15	10) 165	to 185		
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 20 Clause 14	10) 95	to 115		
		Unsaponifiable matter	IS 548 (Part I): 1964 (RA 20 Clause 8	10) 0.5	% to 4.0 %		
		Acid Value	IS 548 (Part I): 1964 (RA 20 Clause 7	10) 1.00	) to 5.00		
		Allyl isothiocyanate	IS 548 (Part I): 1964 (RA 20 Clause 17	10) 0.02	2 % to 0.60 %		
		Bellier Turbidity temperature Test	IS 548 (Part II): 1964 (RA 20 Clause 13	010) 21°	C to 30 °C		
		Test for presence of Argemone oil	IS 548 (Part II): 1976 (RA 20 Clause 10	010) Qua	litative		

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		Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 2 Clause 12.2	010)	Quali	tative	
		Test for presence of Castor Oil (AMT)	IS 548 (Part II): 1976 (RA 2 Clause 15.1	010)	Quali	tative	
		Test for presence of Hydrocyanic Acid (HCN)	IS 548 (Part II): 1976 (RA 2 Clause 11.2	010)	Quali	tative	
		Test for presence of Linseed Oil (HBR)	IS 548 (Part II): 1976 (RA 2 Clause 8	010)	Quali	tative	
		Test for presence of added colour	IS 548 (Part II): 1976 (RA 2 Clause 19	010)	Quali	tative	
b.	Groundnut Oil	Moisture content	IS 548 (Part I): 1964 (RA 20 Clause 5.1	)10)	0.05	% to 0.50 %	
		Specific gravity at 30°C/30°C	IS 548 (Part I): 1964 (RA 20 Clause 11.3	)10)	0.905	to 0.918	
		Refractive Index @40°C	IS 548 (Part I): 1964 (RA 20 Clause 10	)10)	1.461	5 to 1.4700	
		Saponification value	IS 548 (Part I): 1964 (RA 20 Clause 15	)10)	180 to	o 200	
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 20 Clause 14	)10)	84 to	100	
		Unsaponifiable matter	IS 548 (Part I): 1964 (RA 20 Clause 8	)10)	0.50 9	% to1.50 %	

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specificatio against which tests are performed			f Testing / Detection		
		Acid Value	IS 548 (Part I): 1964 (RA 201 Clause 7	10)	0.01 % t	0 5.0 %		
		Bellier Turbidity temperature Test	IS 548 (Part II): 1976 (RA 20 Clause 13	)10)	35°C to 4	45 °C		
		Test for presence of Castor Oil (AMT)	IS 548 (Part II): 1976 (RA 20 Clause 15.1	)10)	Qualitati	ve		
		Test for Added colour	IS 548 (Part II): 1976 (RA 20 Clause 19	010)	Qualitati	ve		
		Test for presence of Argemone Oil	IS 548 (Part II): 1976 (RA 20 Clause 10	)10)	Qualitati	ve		
		Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 20 Clause 12.2 (by TLC)	)10)	Qualitati	ve		
c.	Sesame Oil	Moisture content	IS 548 (Part I): 1964 (RA 201 Clause 5.1	10)	0.05 % t	0 0.50 %		
		Specific gravity @ 30 °C/30 °C	IS 548 (Part I): 1964 (RA 201 Clause 11.3	10)	0.912 to	0.925		
		Refractive Index @ 40 °C	IS 548 (Part I): 1964 (RA 201 Clause 10	10)	1.4626 to	o 1.4700		
		Saponification value	IS 548 (Part I): 1964 (RA 201 Clause 15	10)	185 to 20	00		
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 201 Clause 14	10)	100 to 12	20		

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		Unsaponifiable matter	IS 548 (Part I): 1964 (RA 20) Clause 8	10)	0.5 % to 2.0 %
		Acid Value	IS 548 (Part I): 1964 (RA 201 Clause 7	10)	0.05 to 8.00
		Bellier's Turbidity temperature Test	IS 548 (Part II): 1976 (RA 20 Clause 13	)10)	18 °C to 24 °C
		Test for presence of Castor Oil (AMT)	IS 548 (Part II): 1976 (RA 20 Clause 15.1	)10)	Qualitative
		Test for presence of cotton seed oil (HT)	IS 548 (Part II): 1976 (RA 20 Clause 7	)10)	Qualitative
		Test for Added Colour	IS 548 (Part II): 1976 (RA 20 Clause 19	)10)	Qualitative
		Test for presence of Argemone	IS 548 (Part II): 1976 (RA 20 Clause 10	)10)	Qualitative
		Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 20 Clause 12.2 (by TLC)	)10)	Qualitative
d.	Coconut Oil	Moisture content	IS 548 (Part I): 1964 (RA 201 Clause 5.1	10) (	0.05 % to 0.50 %
		Specific gravity @ 30 °C/ 30 °C	IS 548 (Part I): 1964 (RA 201 Clause 11.3	10) (	0.910 to 0.925
		Refractive Index @ 40 °C	IS 548 (Part I): 1964 (RA 201 Clause 10	10)	1.4474 to 1.4502

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S.No. Product / S.No. S.No. Material of Test	Specific Test Performed	Test Method Specificatior against which tests are performed		e of Testing / s of Detection
S	Saponification value	IS 548 (Part I): 1964 (RA 201) Clause 15	0) 245 t	o 270
Ι	fodine Value (Wijs)	IS 548 (Part I): 1964 (RA 2010 Clause 14	0) 6.5 to	0 14.0
τ	Unsaponifiable matter	IS 548 (Part I): 1964 (RA 201) Clause 8	0) 0.05	% to 1.0 %
1	Acid Value	IS 548 (Part I): 1964 (RA 2010 Clause 7	0) 0.01	to 8.0
Ι	Polenske Value	IS 548 (Part I): 1964 (RA 2010 Clause 19	0) 7.0 t	o 20.0
	Test for presence of Castor Oil (AMT)	IS 548 (Part II): 1976 (RA 201 Clause 15.1	0) Quali	tative
1	Fest for Added Colour	IS 548 (Part II): 1976 (RA 201 Clause 19	0) Quali	tative
1	Fest for presence of Argemone	IS 548 (Part II): 1976 (RA 201 Clause 10	0) Quali	tative
1	Fest for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 201 Clause 12.2 (by TLC)	0) Quali	tative

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S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	on		e of Testing / of Detection	
e.	Sunflower Oil	Moisture content	IS 548 (Part I): 1964 (RA 20 Clause 5.1	)10)	0.05	% to 0.30 %	
		Specific gravity @ 30 °C/30 °C	IS 548 (Part I): 1964 (RA 20 Clause 11.3	)10)	0.910	to 0920	
		Refractive Index @ 40 °C	IS 548 (Part I): 1964 (RA 20 Clause 10	)10)	1.463	5 to 1.4850	
		Saponification value	IS 548 (Part I): 1964 (RA 20 Clause 15	)10)	185 t	o 198	
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 20 Clause 14	)10)	95 to	145	
		Unsaponifiable matter	IS 548 (Part I): 1964 (RA 20 Clause 8	)10)	0.50	% to 2.00 %	
		Acid Value	IS 548 (Part I): 1964 (RA 20 Clause 7	)10)	0.05	to 5.00	
		Test for presence of Castor Oil (AMT)	IS 548 (Part II): 1976 (RA 2 Clause 15.1	010)	Quali	tative	
		Test for Added color	IS 548 (Part II): 1976 (RA 2 Clause 19	010)	Quali	tative	
		Test for presence of Argemone oil	IS 548 (Part II): 1976 (RA 2 Clause 10	010)	Quali	tative	
		Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 2 Clause 12.2 (by TLC)	010)	Quali	tative	

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f.	Soyabean Oil	Moisture content	IS 548 (Part I): 1964 (RA 2010) Clause 5.1	0.01	% to 0.20 %		
		Specific gravity @ 30 °C/ 30 °C	IS 548 (Part I): 1964 (RA 2010) Clause 11.3	0.915	5 to 0.925		
		Refractive Index @ 40°C	IS 548 (Part I): 1964 (RA 2010) Clause 10	1.463	80 to 1.4730		
		Saponification value	IS 548 (Part I): 1964 (RA 2010) Clause 15	185 t	o 200		
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 2010) Clause 14	115 t	o 145		
		Unsaponifiable matter	IS 548 (Part I): 1964 (RA 2010) Clause 8	0.2 %	b to 2.0 %		
		Acid Value	IS 548 (Part I): 1964 (RA 2010) Clause 7	0.05	to1.00		
		Test for presence of castor Oil (AMT)	IS 548 (Part II): 1976 (RA 2010) Clause 15.1	Qual	itative		
		Test for presence of linseed oil (HBR)	IS 548 (Part II): 1976 (RA 2010) Clause 8	Qual	itative		
		Test for Added color	IS 548 (Part II): 1976 (RA 2010) Clause 19	Qual	itative		
		Test for presence of Argemone Oil	IS 548 (Part II): 1976 (RA 2010) Clause 10	Qual	itative		
		Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 2010) Clause 12.2 (by TLC)	Qual	itative		

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g.	Ricebran Oil	Moisture content	IS 548 (Part I): 1964 (RA 20 Clause 5.1	)10)	0.05 % to 0.20 %			
		Specific gravity @ 30 °C/ 30 °C	IS 548 (Part I): 1964 (RA 20 Clause 11.3	)10)	0.908 to 0.922			
		Refractive Index @ 40 °C	IS 548 (Part I): 1964 (RA 20 Clause 10	)10)	1.4550 to 1.4730			
		Saponification value	IS 548 (Part I): 1964 (RA 20 Clause 15	)10)	175 to 200			
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 20 Clause 14	)10)	85 to 110			
		Unsaponificable matter	IS 548 (Part I): 1964 (RA 20 Clause 8	)10)	0.5 % to 6.0 %			
		Acid Value	IS 548 (Part I): 1964 (RA 20 Clause 7	)10)	0.05 to 1.00			
		Test for Added colour	IS 548 (Part II): 1976 (RA 2 Clause 19	2010)	Qualitative			
		Test for presence of Argemone Oil	IS 548 (Part II): 1976 (RA 2 Clause 10	2010)	Qualitative			
		Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 2 Clause 12.2 (by TLC)	2010)	Qualitative			

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h.	Castor Oil	Moisture content	IS 548 (Part I): 1964 (RA 20 Clause 5.1	)10) (	0.05 % to 1.25 %		
		Specific gravity @ 30 °C/ 30 °C	IS 548 (Part I): 1964 (RA 20 Clause 11.3	010) (	0.940 to 0.970		
		Refractive Index @ 40 °C	IS 548 (Part I): 1964 (RA 20 Clause 10	)10) 1	.4680 to 1.4770		
		Saponification value	IS 548 (Part I): 1964 (RA 20 Clause 15	)10) 1	70 to 195		
		Iodine Value (Wijs)	IS 548 (Part I): 1964 (RA 20 Clause 14	)10) 8	30 to 95		
		Acetyl Value	IS 548 (Part I): 1964 (RA 20 Clause 16.1	)10) 1	40 to 155		
		Acid Value	IS 548 (Part I): 1964 (RA 20 Clause 7	)10) (	0.05 to 7.00		
i	Blended Edible Oil	Moisture content	IS 548 (Part I): 1964 (RA 20 Clause 5.1	)10) (	0.05 % to 0.50 %		
		Unsaponifiable matter	IS 548 (Part I): 1964 (RA 20 Clause 8	)10) (	0.30 % to 4.50 %		
		Acid Value	IS 548 (Part I): 1964 (RA 20 Clause 7	)10) (	0.01 to 8.00		
		Test for presence of Castor Oil (AMT)	IS 548 (Part II): 1976 (RA 2 Clause 15.1	.010) (	Qualitative		

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	Test for presence of linseed oil (HBR)	IS 548 (Part II): 1976 (RA 2 Clause 8	010)	Qualitative	
	Test for presence of Hydrocyanic acid (HCN)	IS 548 (Part II): 1976 (RA 2 Clause 11.2	010)	Qualitative	
	Test for Added colour	IS 548 (Part II): 1976 (RA 2 Clause 19	010)	Qualitative	
	Test for presence of Argemone Oil	IS 548 (Part II): 1976 (RA 2 Clause 10	010)	Qualitative	
	Test for presence of Mineral Oil	IS 548 (Part II): 1976 (RA 2 Clause 12.2 (by TLC)	010)	Qualitative	