

Physical Properties of fats and Oils

The physical data are taken from the following publications

- Black** Ullmann's encyclopedia of industrial chemistry,
Vol A 10, Fats and oils, VCH, Weinheim 1995
- Blue** Bailey's industrial oil & fat products, 6th edition 2005,
Wiley-Interscience New York
- Pink** Physical and chemical characteristics of oils, fats,
and waxes, Champaign, Illinois, AOCS Press, 2006
- Red** Manuel des corps gras, AFCEG, Paris 1992

Oil / Fat	Cloud point in °C
Coconut oil	
Corn oil	-14,0 - -11,0
Cottonseed oil, RBD	-1,0 - 3,0
Flaxseed oil	
Olive oil	
Palm oil	
Palm olein	6,6 - 14,3
Palm stearin	
Palm oil, neutralized	
Palm oil, neutralized and bleached	
Peanut oil	
Rapeseed oil	
Rapeseed oil (HEAR)	
Rice bran oil	
Safflower oil	
Sesame oil	
Soybean oil	-9,0
Sunflower oil, crude high-oleic	
Sunflower oil, crude mid-oleic	

Oil / Fat	Fire point in °C	
Coconut oil	329	
Corn oil	360	371
Cottonseed oil	342 / 357	
Olive oil		
Palm oil	341	
Palm olein		
Palm stearin		
Peanut oil	342 / 363	
Peanut oil, hardened	340	
Rapeseed oil	344	
Rapeseed oil (HEAR)		
Rice bran oil		
Safflower oil		
Sesame oil		
Soybean oil	342	360
Soybean oil, crude degummed		
Soybean oil, hardened	342	
Sunflower oil	341	
Sunflower oil, crude high-oleic		
Sunflower oil, crude mid-oleic		
Animal fats		
Beef tallow	344	

Oil / Fat	Flash point in °C
Coconut oil	300 / 288 / 270
Corn oil	332 - 338
Cottonseed oil	322 / 318
Cottonseed oil, RBD	
Flaxseed oil	120 - 135
Olive oil	
Palm oil	314
Palm olein	
Peanut oil	315 / 333 / 290
Peanut oil, hardened	314
Rapeseed oil	317
Rapeseed oil (Canola)	275 - 290
Rapeseed oil (Canola), crude	
Rapeseed oil (Canola), (RBD)	
Rapeseed oil (Canola), nonhydrog.,deodor.	
Rapeseed oil (HEAR)	278 - 282
Rice bran oil	
Rice bran oil (RBD)	
Safflower oil	
Sesame oil	
Soybean oil	317 324
Soybean oil, crude degummed	121
Soybean oil, once-refined	121
Soybean oil, fully refined	
Soybean oil, hardened	318
Sunflower oil	316
Sunflower oil, crude high-oleic	
Sunflower oil, crude mid-oleic	
Animal fats	
Beef tallow	316 / 266

Oil / Fat	Iodine value g/100 g		
Almond oil	92	-	106
	94	-	101
Apricot kernel oil	97	-	110
Argan seed oil	92	-	102
Avocado oil	63	-	95
	85	-	90
Babassu oil	10	-	18
	10	-	18
Blackcurrent oil	173		182
Camelina oil	127	-	155
	130	-	145
Cashew nut oil	79	-	89
Castor oil	82	-	88
	81	-	91
Chia oil	190	-	199
	196	-	199
Cocoa butter	33	-	40
	32	-	40
Coconut oil	6	-	9
	6,3	-	11
	6	-	11
Coconut oil, cochin	7	-	12
Coconut oil, RBD	7	-	12
Corn oil	127	-	133
Cottonseed oil	103	-	115
	100	-	123
	100	-	115
Cottonseed oil, RBD	98	-	118
Crambe oil	93		
Flaxseed oil	182	-	203
Grape seed oil	130	-	138
	128	-	150
Hazelnut oil	85	-	95
Illipe butter	58	-	65
Linseed oil	170	-	204
Maize germ oil	103	-	128
	103	-	135
	107	-	128
Melon seed oil	124		
Mustardseed oil	92	-	125
Oiticica oil	140	-	180

Oil / Fat	Iodine value g/100 g		
Olive oil	75	-	94
Ongokea oil	180	-	205
Palm kernel oil	16	-	23
	14,1	-	21
Palm oil	50,6	-	55
	51	-	54
	50	-	55
Palm olein	56	-	61
Palm stearin			
Palm oil, neutralized	50	-	55
Palm oil, neutralized and bleached	50	-	55
	≥ 56		
Palm oil (RBD/NBD)	50	-	55
Palm olein, crude	56		
Palm olein, neutralized	56		
Palm olein, neutralized and bleached	56		
Palm olein (RBD/NBD)	56		
Palm stearin	22	-	49
	≤ 48		
Palm superolein	≥ 60		
Peanut oil	86	-	107
	86	-	107
Peanut oil, Africa	85	-	90
Peanut oil, South America	92	-	110
Perilla oil	192	-	208
Poppyseed oil	130	-	143
Pumpkin seed oil	117		
Rapeseed oil	94	-	120
Rapeseed oil (Canola)	110	-	126
Rapeseed oil, erucic acid incl.	100	-	106
Rapeseed oil, erucic acid excl.	112	-	117
Rapeseed oil (HEAR)	97	-	108
Rapeseed oil (low erucic acid)	105	-	126
Rice bran oil	100		
Rice bran oil (RBD)	99	-	108
Safflower oil	141	-	147
	136	-	148
Safflower oil (high oleic acid)	80	-	100
Safflower oil, linoleic	135	-	150
Safflower oil, oleic	91	-	95

Oil / Fat	Iodine value g/100 g		
Sesame oil	104	-	120
	104	-	120
	104	-	120
Shea butter	52	-	66
Soybean oil	125	-	128
Soybean oil	124	-	139
Sunflower oil	120	-	134
	118	-	141
Sunflower oil, crude high-oleic	78	-	90
Sunflower oil, crude mid-oleic	94	-	122
Sunflower oil (high oleic acid)	78	-	90
Sunflower oil (mid-oleic acid)	94	-	122
Tung oil	166	-	170
Vernonia oil	104	-	108
Walnut oil	135	-	151
Wheat germ oil	118	-	128
Animal fats			
Bone oil	52	-	55
Lard	58	-	65
Tallow	42	-	51

Oil / Fat	Lovibon colour	
Coconut oil, crude	5 1/4 in.cell R/Y	12/75 max.
Coconut oil, cochin	5 1/4 in.cell R/Y	1/10 max.
Coconut oil, RBD	5 1/4 in.cell R/Y	1/10 max.
Corn oil		3,0 red max.
Palm oil, neutralized and bleached		20 red max.
Palm oil (RBD/NBD)		3 or 6 red max.
Palm olein, neutralized and bleached		20 red max.
Palm olein (RBD/NBD)		3 or 6 red max.
Peanut oil		yellow 16-25; 2,0 red (max.)
Rapeseed oil (Canola), (RBD)		<1,5 red/10 yellow
Rapeseed oil (Canola), nonhydrog.,deodor.	red, 5.25 inch	0,3-1,5
Rice bran oil (RBD)	5.25-in Lovibond red	5,0 max.
Soybean oil, once-refined		3,5 red max.
Soybean oil, fully refined		20 yellow, 2.0 red max.

Oil / Fat	Melting point in °C
Babassu oil	24,0 - 26,0
Cocoa butter	31,0 - 35,0
	31,0 - 35,0
Coconut oil	23,0 - 26,0
	23,0 - 26,0
Coconut oil, crude	
Coconut oil, cochin	24,0 - 26,0
Coconut oil, RBD	24,0 - 26,0
Corn oil	-11,0 - -8,0
Cottonseed oil	10,0 - 15,5
Cottonseed oil, RBD	10,0 - 16,0
Crambe oil	6,0
Flaxseed oil	-20,0 - -24,0
Palm kernel oil	23,0 - 30,0
Palm oil	30,8 - 37,6
	27,0 - 45,0
Palm olein	19,4 - 23,5
Palm stearin	44,5 - 56,2
Palm oil, neutralized	33,0 - 39,0
Palm oil, neutralized and bleached	33,0 - 39,0
Palm oil (RBD/NBD)	33,0 - 39,0
Palm olein, crude	24,0
Palm olein, neutralized	24,0
Palm olein, neutralized and bleached	24,0
Palm olein (RBD/NBD)	24,0
Peanut oil	0 - 3,0
Soybean oil	0,6
Animal fats	
Bone oil	39,0 - 41,0
Lard	32,0 - 38,0

Oil / Fat	Density ρ in g/ml at 15 °C	Relative density d at			
		15 °C/15 °C	20 °C/20 °C	25 °C/25 °C	40 °C
Almond oil		0,9150 - 0,9200	0,9110 - 0,9170	0,9100 - 0,9160	
Apricot kernel oil		0,9150 - 0,9210		0,9100 - 0,9160	
Argan seed oil		0,9060 - 0,9190			
Avocado oil			0,9100 - 0,9200	0,9100 - 0,9200	
Babassu oil	0,9250	0,9140 - 0,9170		0,9140 - 0,9170	
Blackcurrent oil			0,9210 - 0,9280		
Camelina oil		0,9250	0,9170 - 0,9240		
Cashew nut oil		0,9110 - 0,9180			
Castor oil	0,9500 - 0,9740	0,9560 - 0,9700	0,9550 - 0,9680	0,9450 - 0,9650	
				0,9450 - 0,9650	
Chia oil	0,9360			0,9330	
Cocoa butter	0,9450 - 0,9760	0,8560 - 0,8640*		0,9730 - 0,9800	0,9060 - 0,9090
Coconut oil	0,9190 - 0,9370	0,8690 - 0,8740*	0,9171		0,9080 - 0,9200
		0,9080 - 0,9210			0,9080 - 0,9210
Corn oil				0,9188	
Corn germ oil	0,9200 - 0,9280			0,9160 - 0,9210	
Cottonseed oil	0,9170 - 0,9310		0,9180	0,9160 - 0,9180	
			0,9170 - 0,9250		
			0,9180 - 0,9260		
Cottonseed oil, RBD				0,9160 - 0,9180	
Crambe oil			0,9080		
Flaxseed oil			0,9250 - 0,9350		
Grape seed oil	0,9190 - 0,9360		0,9230 - 0,9260		
			0,9200 - 0,9260		
Hazelnut oil			0,9120 - 0,9150		
Hempseed oil	0,9240 - 0,9320	0,9230 - 0,9250			

Oil / Fat	Density ρ in g/ml at 15 °C	Relative density d at			
		15 °C/15 °C	20 °C/20 °C	25 °C/25 °C	40 °C
Illipe butter					0,9020 - 0,9050
Linseed oil	0,9300 - 0,9350		0,9280 - 0,9330	0,9310 - 0,9360	
Maize germ oil			0,9170 - 0,9250		
Mustard seed oil	0,9120 - 0,9230		0,9170 - 0,9250		
Oiticica oil	0,9518 - 0,9694	0,9780	0,9100 - 0,9210		
Olive oil	0,9140 - 0,9250		0,9660 - 0,9770	0,9145	0,9090 - 0,9150
Ongokea oil			0,9100 - 0,9160		
Palm oil	0,9210 - 0,9470	0,898 - 0,9010***	0,9750 - 0,9950	0,9119	0,8880 - 0,8890**
					0,8950 - 0,9000
					0,8910 - 0,8990**
Palm kernel oil	0,9250 - 0,9350	0,8600 - 0,8730*	0,9252		0,8990 - 0,9130
					0,8990 - 0,9140
Palm olein					0,8965 - 0,8992
					0,8990 - 0,9200
Palm stearin					0,8810 - 0,8910****
Palm superolein					0,9000 - 0,9250
Peanut oil	0,9110 - 0,9250		0,9120 - 0,9200	0,9100 - 0,9150	
			0,9120 - 0,9200		
Peanut oil, Africa			0,9140 - 0,9170		
Peanut oil, South America			0,9170 - 0,9200		
Perilla oil	0,9270 - 0,9330	0,9370			
		0,9320			
Poppyseed oil	0,9230 - 0,9260		0,9250 - 0,9280		
Rapeseed oil	0,9100 - 0,9170		0,9115	0,9060 - 0,9100	

Oil / Fat	Density ρ in g/ml at 15 °C	Relative density d at			
		15 °C/15 °C	20 °C/20 °C	25 °C/25 °C	40 °C
Rapeseed oil (Canola)			0,9100 - 0,9200 0,9140 - 0,9170		
Rapeseed oil, erucic acid incl.			0,9100 - 0,9160		
Rapeseed oil, erucic acid excl.			0,9140 - 0,9170		
Rapeseed oil (HEAR)			0,9070 - 0,9110		
Rapeseed oil (low erucic acid)			0,9140 - 0,9200		
Rice bran oil				0,9160 - 0,9210	
Safflower oil	0,9230 - 0,9280		0,9220 - 0,9270	0,9190 - 0,9240	
Safflowerseed oil (high oleic acid)			0,9130 - 0,9190	0,9100 - 0,9160	
Safflower oil, linoleic			0,9220 - 0,9270		
Safflower oil, oleic			0,9100 - 0,9160		
Sesame oil	0,9210 - 0,9240		0,9150 - 0,9240 0,9150 - 0,9230 0,9150 - 0,9240	0,9140 - 0,9190	
Shea butter	0,9170 - 0,9180				0,9000 - 0,9020
Soybean oil	0,9220 - 0,9340		0,9165 - 0,9261 0,9210 - 0,9240 0,9190 - 0,9250	0,9170 - 0,9210	
Sunflower oil	0,9200 - 0,9270		0,9191 0,9200 - 0,9250 0,9180 - 0,9230	0,9150 - 0,9190	
Sunflower oil, crude high-oleic				0,9090 - 0,9150	
Sunflower oil, crude mid-oleic				0,9140 - 0,9160	
Sunflower oil (high oleic acid)				0,9090 - 0,9150	
Sunflower oil (mid-oleic acid)			0,9140 - 0,9160		
Tung oil	0,9360 - 0,9450	0,9400 - 0,9430	0,9340 - 0,9430		

Oil / Fat	Density ρ in g/ml at 15 °C	Relative density d at			
		15 °C/15 °C	20 °C/20 °C	25 °C/25 °C	40 °C
Vernonia oil				0,9050 - 0,9730	
Walnut oil			0,9240 - 0,9260		
Wheat germ oil			0,9240 - 0,9250	0,9250 - 0,9330	
Animal fats					
Beef tallow	0,9360 - 0,9520	0,8600 - 0,8700*			
Bone oil					0,8840 - 0,8870**** 0,8750 - 0,8770*****
Butterfat	0,9350 - 0,9430				
Fish oil			0,9260		
Herring oil	0,9170 - 0,9300				
Horse fat	0,9150 - 0,9320				
Lard	0,9140 - 0,9430	0,8580 - 0,8640*		0,8760 - 0,8770***	0,8720 - 0,8730*****
Menhaden oil	0,9250 - 0,9350				
Mutton tallow	0,9360 - 0,9600				
Sperm oil	0,8750 - 0,8900				
Tallow			0,9388		0,8850 - 0,8870**** 0,8750 - 0,8770***** 0,8750 - 0,8770*****
Whale oil	0,9140 - 0,9310			0,9100 - 0,9200	

* d 99,0/15,5

** d 50°C

*** d 37,8/37,8

**** D 60°C

***** D 80°C

Oil / Fat	Refractive index n_D			
	t = 20°C	t = 25°C	t = 40°C	t = 60°C
Almond oil	1,471 - 1,472	1,4640 - 1,4700	1,4620 - 1,4660	
Apricot kernel oil		1,4670 - 1,4700	1,4620 - 1,4660	
Argan seed oil		1,4630 - 1,4708		
Avocado oil	1,4650 - 1,4740	1,4620 - 1,4700	1,4580 - 1,4650	
Babassu oil			1,4490 - 1,4500	
			1,4480 - 1,4510	
Blackcurrent oil	1,4790 - 1,4810			
Camelina oil	1,4698			
	1,4750 - 1,4760			
Cashew nut oil			1,4620 - 1,4640	
Castor oil	1,4770 - 1,4790	1,4730 - 1,4770	1,4660 - 1,4730	
	1,4760 - 1,4810			
Chia oil	1,4753	1,4812	1,4753	
Cocoa butter			1,4530 - 1,4580	
			1,4560 - 1,4580	
Coconut oil			1,4480 - 1,4500	
			1,4480 - 1,4500	
			1,4480 - 1,4500	
Coconut oil, crude				
Coconut oil, cochin			1,4448 - 1,4500	
Coconut oil, RBD			1,4448 - 1,4500	
Corn oil	1,4740 - 1,4760	1,4726*		
Corn germ oil				
Cottonseed oil	1,4720 - 1,4770		1,4580 - 1,4660	
	1,4700 - 1,4730			

Oil / Fat	Refractive index n_D			
	t = 20°C	t = 25°C	t = 40°C	t = 60°C
Cottonseed oil, RBD		1,4680 - 1,4720		
Crambe oil	1,4720			
Flaxseed oil	1,4750 - 1,4750			
Grape seed oil	1,4740 - 1,4780 1,4730 - 1,4760		1,4670 - 1,4770	
Hazelnut oil	1,4700 - 1,4710			
Illipe butter			1,4650 - 1,4700	
Linseed oil	1,4790 - 1,4810 1,4790 - 1,4840			
Maize germ oil	1,4740 - 1,4770	1,4700 - 1,4730	1,4650 - 1,4680	
Melon seed oil	1,4710			
Mustard seed oil	1,4700 - 1,4740		1,4610 - 1,4690	
Olive oil	1,4670 - 1,4710			
Oiticica oil	1,4921 - 1,4945 1,511 - 1,5170			
Olive oil	1,4670 - 1,4710 1,4680 - 1,4700			
Ongokea oil	1,5050 - 1,5150			
Palm oil		1,4550 - 1,4560**	1,4530 - 1,4560 1,4530 - 1,4580	1,4540 - 1,4560**
Palm kernel oil			1,4490 - 1,4520 1,4500 - 1,4520 1,4480 - 1,4520	
Palm olein			1,4586 - 1,4592 1,4580 - 1,4600	
Palm oil, neutralized				

Oil / Fat	Refractive index n _D			
	t = 20°C	t = 25°C	t = 40°C	t = 60°C
Palm oil, neutralized and bleached				
Palm oil (RBD/NBD)				
Palm olein, crude				
Palm olein, neutralized				
Palm olein, neutralized and bleached				
Palm olein (RBD/NBD)				
Palm stearin				1,4472 - 1,4511
				1,4470 - 1,4520
Palm superolein			1,4630 - 1,4650	
Peanut oil	1,4600 - 1,4720		1,4600 - 1,4650	
			1,4600 - 1,4650	
Peanut oil, Africa	1,4700 - 1,4720			
Peanut oil, South America	1,4720 - 1,4740			
Perilla oil	1,4810 - 1,4830			
	1,4761			
Poppyseed oil	1,4750 - 1,4760			
Pumpkin seed oil	1,4720			
Rapeseed oil	1,4720 - 1,4760		1,4650 - 1,4690	
Rapeseed oil (Canola)			1,4650 - 1,4670	
Rapeseed oil, erucic acid incl.	1,4720 - 1,4730			
Rapeseed oil, erucic acid excl.	1,4720 - 1,4730			
Rapeseed oil (HEAR)			1,4650 - 1,4690	
Rapeseed oil (low erucic acid)			1,4650 - 1,4670	
Rice bran oil (RBD)		1,4700 - 1,4730***		
Safflower oil	1,4754	1,4730 - 1,4760	1,4670 - 1,4700	
Safflower oil (high oleic acid)		1,4660 - 1,4700	1,4600 - 1,4640	

Oil / Fat	Refractive index n_D			
	t = 20°C	t = 25°C	t = 40°C	t = 60°C
Safflower oil, linoleic	1,4740 - 1,4780			
Safflower oil, oleic	1,4700 - 1,4740			
Sesame oil	1,4730 - 1,4760		1,4650 - 1,4690	
	1,4740 - 1,4770		1,4650 - 1,4690	
Shea butter			1,4630 - 1,4680	
Soybean oil	1,4700 - 1,4780		1,4660 - 1,4700	
	1,4730 - 1,4770			
Soybean oil, crude degummed				
Soybean oil, once-refined				
Soybean oil, fully refined				
Sunflower oil	1,4740 - 1,4760		1,4610 - 1,4680	
	1,4740 - 1,4760			
Sunflower oil, crude high-oleic		1,4670 - 1,4710		
Sunflower oil, crude mid-oleic		1,4610 - 1,4710		
Sunflower oil (high oleic acid)		1,4670 - 1,4710		
Sunflower oil (mid-oleic acid)		1,4610 - 1,4710		
Tung oil	1,5170 - 1,5260			
	1,5180 - 1,5250			
Vernonia oil		1,4740 - 1,4860		
Walnut oil	1,4750 - 1,4760			
Wheat germ oil	1,4740 - 1,4780		1,4690 - 1,4780	
Animal fats				
Beef tallow			1,4540 - 1,4590	
Butterfat			1,4520 - 1,4570	
Fish oil				

Oil / Fat	Refractive index n_D			
	t = 20°C	t = 25°C	t = 40°C	t = 60°C
Herring oil			1,4700 - 1,4750	
Horse fat				
Lard			1,4580 - 1,4610	1,4510 - 1,4530
Menhaden oil	1,4800			
Mutton tallow			1,4550 - 1,4580	
Sperm oil				
Tallow				1,450 - 1,4510
Whale oil	1,4630 - 1,4710			

* n_D 26°C

** n_D 50°C

*** n_D k.Ang.

Oil / Fat	Saponification value in mg KOG/g oil		
Almond oil	189	-	196
	188	-	200
Apricot kernel oil	97	-	110
Argan seed oil	190	-	195
Avocado oil	177	-	198
	177	-	198
Babassu oil	245	-	256
	245	-	256
Blackcurrent oil	185	-	195
Camelina oil	180	-	190
	188	-	194
Cashew nut oil	180	-	196
Castor oil	175	-	187
	176	-	187
Chia oil	180	-	192
	192		
Cocoa butter	192	-	200
	192	-	200
Coconut oil	250	-	264
	248	-	265
Coconut oil, cochin	250	-	264
Coconut oil, RBD	250	-	264
Corn oil	187	-	193
Cottonseed oil	189	-	198
	189	-	198
Cottonseed oil, RBD	189	-	198
Crambe oil	160	-	175
Flaxseed oil	187	-	195
Grape seed oil	188	-	194
	188	-	194
Hazelnut oil	190	-	195
Illipe butter	190	-	194
Linseed oil	189	-	196
Maize germ oil	187	-	195
	187	-	195
Melon seed oil	188		
Mustard seed oil	168	-	184
Oiticica oil	187	-	193
Olive oil	184	-	196
Ongokea oil	188	-	195
Palm kernel oil	242	-	254

Oil / Fat	Saponification value in mg KOG/g oil		
	230	-	254
Palm oil	190	-	202
	195	-	205
	190	-	209
Palm olein	194	-	202
Palm stearin	193	-	206
	194	-	202
Palm stearin	193	-	205
Palm superolein	180	-	205
Peanut oil	187	-	196
	187	-	196
Peanut oil, Africa	189	-	196
Peanut oil, South America	188	-	194
Perilla oil	188	-	197
Poppyseed oil	188	-	195
Pumpkin seed oil	187		
Rapeseed oil	168	-	181
Rapeseed oil (Canola)	188	-	192
Rapeseed oil (HEAR)	168	-	181
Rapeseed oil, erucic acid incl.	170	-	175
Rapeseed oil, erucic acid excl.	190	-	193
Rapeseed oil (low erucic acid)	182	-	193
Rice bran oil	212		
Rice bran oil (RBD)	180	-	190
Safflower oil	186	-	194
	186	-	198
Safflower oil (high oleic acid)	186	-	194
Safflower oil, linoleic	186	-	198
Safflower oil, oleic	186	-	198
Sesame oil	186	-	195
	187	-	195
	186	-	195
Shea butter	178	-	193
Soybean oil	188	-	195
	189	-	195
Sunflower oil	188	-	193
	188	-	194
Sunflower oil, crude high-oleic	182	-	194
Sunflower oil, crude mid-oleic	190	-	191
Sunflower oil (high oleic acid)	182	-	194
Sunflower oil (mid-oleic acid)	190	-	191

Oil / Fat	Saponification value in mg KOG/g oil		
Tung oil	188	-	197
Vernonia oil	165	-	210
Walnut oil	189	-	198
Wheat germ oil	190	-	196
Animal fats			
Bone oil	192	-	200
Lard	192	-	197
Tallow	192	-	198

Oil / Fat	Smoke point °C
Coconut oil, RBD	
Corn oil	230 - 238
Cottonseed oil	223 / 185
Palm oil	223
Rapeseed oil (Canola)	220 - 230
Rice bran oil (RBD)	213

Oil / Fat	Specific heat in J/g at °C	
Coconut oil, crude		
Cottonseed oil	2,200	90
Cottonseed oil, hardened	2,177	79,6
Linseed oil	2,050	70,7
Olive oil	2,300	110
Palm oil	2,400	140
Rapeseed oil (Canola)	1,910 - 1,916	20
Rapeseed oil (HEAR)	1,900 - 1,911	20
Sunflower oil	2,500	175

Oil / Fat	Unsaponifiable in g			
	20 °C	80 °C	130 °C	25 °C
Castor oil	39,0	35,2	33,0	
Coconut oil	33,4	28,4	24,0	
Corn oil				34,8
Cottonseed oil	35,4	31,3	27,5	
Peanut oil				35,6

Oil / Fat	Titer °C		
Almond oil	-10	-	-20
Apricot kernel oil	0	-	6
Avocado oil	7	-	9,0
Camelina oil	-11	-	-18
Cashew nut oil	28	-	30
Cocoa butter	45	-	51
	45	-	50
Cottonseed oil, RBD	30	-	37
Cottonseed oil, RBD	12	-	-13
Grape seed oil	-11	-	-17
Hazelnut oil	-18	-	-20
Maize germ oil	-10	-	-18
Oiticica oil	42	-	47
Safflower oil	15	-	17
Safflower oil, linoleic	-15,0		
Tung oil	36	-	40
Walnut oil	-15	-	-25
Animal fats			
Lard	38	-	42
Tallow	41	-	44

Oil / Fat	Dynamische Viscosity η (Eta) in mPA s						
	20°C	25°C	30°C	37,5°C	40°C	50°C	60°C
Almond oil	66 - 76						
Castor oil	1000 950 - 1100		454		232	128	
Coconut oil			39		26	19 17 - 20	
Corn oil					31		18
Cottonseed oil	80 65 - 69		55		38	27	
Cottonseed oil, RBD							
Crambe oil		85					
Grape seed oil	53 - 58						
Hazelnut oil	66 - 76						
Linseed oil	48		33		25	18	
Olive oil	80 75 - 79		55		40	30	
Palm kernel oil			43		29	20 17 - 20 25 - 31	
Peanut oil, South America	68 - 77						
Poppyseed oil	63 51 - 62						
Pumpkin seed oil				31			
Rapeseed oil, erucic acid excl.	72 - 82						
Safflower oil, linoleic	52 - 54						
Safflower oil, oleic	70 - 75						
Sesame oil	65					25	

Oil / Fat	Dynamische Viscosity η (Eta) in mPA s						
	20°C	25°C	30°C	37,5°C	40°C	50°C	60°C
Soybean oil	64 - 67		45		33	25	
Sunflower oil	59 - 62		47		35	26	
Wheat germ oil	51 - 57		45 - 47				
Animal fats							
Bone oil							20 - 22
Fish oil	60		43		32	22	
Lard					35	25	17 - 20
Tallow						25	19 - 20

Oil / Fat	Unsaponifiable in g
Argan seed oil	0,4 - 1,1
Avocado oil	1,0 - 12,0
Babassu oil	≤ 12,0
Blackcurrent oil	≤ 10,0
Camelina oil	1,2 - 1,5
Cashew nut oil	0,4 - 1,5
Chia oil	1,1 - 1,3
	1,2
Cocoa butter	0,2 - 1,0
Coconut oil	≤ 15,0
	< 1,5
Coconut oil, crude	0,4
Coconut oil, cochin	0,1
Coconut oil, RBD	0,1
Corn oil	1,0 - 3,0
Cottonseed oil	≤ 15,0
	< 2,0
Cottonseed oil, RBD	≤ 1,50
Crambe oil	0,5
Flaxseed oil	0,1 - 1,7
Grape seed oil	≤ 20,0
Maize germ oil	≤ 28,0
	1,0 - 3,0
Mustardseed oil	≤ 15,0
Palm kernel oil	≤ 10,0
Palm oil	0,2 - 1,0
	≤ 12,0
Palm olein	≤ 13,0
Palm stearin	≤ 9,0
Palm superolein	≤ 13,0
Peanut oil	0,4
	≤ 10,0
Perilla oil	1,3 - 1,5
Rapeseed oil	0,5 - 1,2
	≤ 20,0
Rapeseed oil (Canola)	0,5 - 1,2
Rapeseed oil (low erucic acid)	≤ 20,0
Rice bran oil	4,2
Rice bran oil (RBD)	3,0 - 5,0
Safflower oil	0,3 - 0,6
	≤ 15,0

Oil / Fat	Unsaponifiable in g
Safflower oil (high oleic acid)	≤ 10,0
Sesame oil	≤ 20,0
	< 20,0
Soybean oil	≤ 15,0
Soybean oil, crude degummed	1,5
Soybean oil, once-refined	1,5
Soybean oil, fully refined	1,5
Sunflower oil	≤ 15,0
Sunflower oil, crude high-oleic	< 15,0
Sunflower oil, crude mid-oleic	< 15,0
Sunflower oil (high oleic acid)	≤ 15,0
Sunflower oil (mid-oleic acid)	≤ 15,0
Vernonia oil	1,0 - 8,0
Animal fats	
Bone oil	0,2 - 0,3
Lard	0,2 - 0,3
Tallow	0,2 - 0,3