

PRODUCT SPECIFICATION

Product	FATTY ACIDS FROM VEGETABLE OILS for technical application			
Description of product	Fatty acids obtained from different kind of vegetable oils, first of all sunflower seed, rapeseed, palm, coconut, palm kernel and soya bean oils during refining process (neutralization). TARIC: 3823 19 90 90			
ADDITIVES	--			
Standardization parameters	Parameter	Analysis method*		Value
	Water content (KF)	DGF C-III 13a	max	2,5 %
	Impurities	ISO 663	max	0,5 %
	Acid value	ISO 660	min	60,0 mg KOH/g
	Crude fat	ekstrakcyjno-wagowa	min	97,0 %
Fatty acids composition Method*: ISO 5508, ISO 12966-2	C 14:0 & lower FA	myristic acid & lower FA	app.	2,0 – 15,0 %
	C16:0	palmitic acid	app.	11,0 – 36,0 %
	C18:0	stearic acid	app.	3,0 – 8,0 %
	C18:1	oleic acid	app.	24,0 – 32,0 %
	C18:2	linoleic acid	app.	14,0 – 50,0 %
	C18:3	linolenic acid	app.	0,0 – 1,5 %
	C20:0 & higher FA	arachidic acid & higher FA	app.	0,5 – 4,0 %
Storage	Tight containers made of acid-proof steel; protect from light; 40,0 °C – 70,0 °C			
Transport	Tank car made of acid-proof steel, temperature 50,0 – 70,0 °C			
Minimum shelf life	6 months from loading date (in appropriate storage conditions)			
Safety	See The Material Safety Data Sheet (MSDS) The product is not covered the labelling obligation under Directive 67/548/EEC			

* Or alternative method which is comparable with the method pointed in the specification



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This version of the standard product specification replaces all previous versions.

Analysis Report NFC Polska Sp. z o.o.

Method name: C:\EZStart\Projects\Default\Method\FAME 100 120427.met
 Data file: C:\EZStart\Projects\Default\Data\2013\VII\130711\775N.dat
 Acquired: 2013-07-11 12:49:45
 Printed: 2013-07-22 10:17:57
 Description mix MOFA TCC-T8 130703-0905 , pr. 775N , instrument: GC SIM (Offline), Page 1 of 2

Detector 1 Results

Pk #	Kwas	Udział [%]	Powierzchnia piku	Czas retencji RT	Oczekiwany RT
4	C6:0	0,12	6153	8,513	8,520
5	C8:0	0,68	32434	9,415	9,450
7	C10:0	0,50	24712	10,973	11,010
13	C11:0	0,01	629	12,119	12,110
15	C12:0 lauric	5,02	255432	13,314	13,370
20	C14:0 myristic	1,81	93871	16,293	16,380
22	C15:0	0,04	2142	17,915	17,950
24	C16:0 palmitic	27,91	1455540	19,615	19,600
27	C16:1	0,15	7729	20,685	20,680
29	C17:0	0,08	4011	21,158	21,180
32	C18:0 stearic	4,72	240582	22,760	22,760
36	C18:1 n9t + n11t	2,38	119341	23,422	23,410
37	C18:1 n9c + n11c	28,82	1489483	23,770	23,700
44	C18:2 n6t	0,02	781	24,483	24,500
49	C18:2 n6c linoleic	24,34	1233913	25,178	25,220
51	C20:0	0,30	15006	25,756	25,730
53	C18:3 n6 gamma-linolenic	0,01	746	26,241	26,220
55	C20:1	0,12	5735	26,621	26,610
56	C18:3 n3 linolenic	0,23	11788	26,745	26,720
58	C21:0	0,04	2052	27,186	27,150
61	C20:2	0,16	8083	28,004	27,990
64	C22:0 behenic	0,43	21308	28,572	28,580
66	C22:1 n9 erucic	0,01	525	29,390	29,420
67	C23:0	1,76	84300	29,920	29,910
72	C22:2	0,08	3764	30,764	30,750
73	C24:0	0,23	11106	31,241	31,250
77	C24:1	0,03	1686	32,071	32,090

Totals		100,00	5132852		
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C14 i ponizej	8,13	413231
C20 i powyzej	3,16	153565
Kwasy nienasycone UFA	56,36	2883574
Kwasy nasycone SFA	43,64	2249278
suma trans	2,39	120122
suma n-6	24,60	1246506
suma n-3	0,23	11788
1-nienasycone MUFA	29,13	1505158
2-nienasycone 2xUFA	24,58	1245760
3-nienasycone 3xUFA	0,25	12534
PUFA >3xUFA	0,00	0

Totals		192,48	9841516		
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Pozostale parametry:

UFA/SFA =

n-6/n-3 =

LK acid value [mgKOH/g] = 107,59

FFA [%] = 54,08

Woda water [%] = 0,864

Zan. impurities [%] =

LN peroxide value [meqO2/kg] =

UV unsaponifiable matter [%] =

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RAPORT

CPO-R-analiza produktów

Raport analityczny CPO13-001847-1 Nr zlecenia CPO-00249-13 Data 05.03.2013

Numer próbki	13-022633-01
Nazwa próbki	Kwasy tłuszczowe; nr próbki 135N
Pobrane przez	Zleceniodawca
Data przyjęcia	21.02.2013
Data rozpoczęcia badań	21.02.2013
Data zakończenia badań	05.03.2013

Analizy chemiczne

Numer próbki	13-022633-01		
Fosfor ogólny (P)	mg/kg	OS	17
Siarka (S)	mg/kg	OS	<20