BioPlant Natura
PREMIUM herbal oils

Certificate of Analysis

Acorus calamus Infused oil
Acorus calamus Rhizome infused in Helianthus Annuus Seed Oil
CAS-No N/A, N/A, 8001-21-6, 84775-39-3
EINECS No. N/A, 232-273-9, 283-869-0

ANALYTICAL DETAILS	RANGE	RESULT
APPEARANCE	Clear, yellow, slightly viscous liquid	Conforms
ODOUR	No off taints	Conforms
COLOUR (GARDNER SCALE)	> 10	N/D
SPECIFIC GRAVITY @ 20°C	0.905 - 0.923	920
REFRACTIVE INDEX @ 20°C	1.462 - 1.510	1463
FREE FATTY ACID (% AS OLEIC)	≤ 2.0	0.04
IODINE VALUE (CALC)	112 – 145	130.5
PEROXIDE VALUE (MEQ O_2/ KG)	≤ 5.0	0.45
SAPONIFICATION VALUE	180 – 200	N/D
UNSAPONIFIABLE MATTER	≤ 1.5	N/D
FLASH POINT (°C)	> 100	N/D
ACID VALUE	≤ 4.0	0.07

Fatty Acid Profile		Range %	Result
C-chain	Acid name		
C16:0	PALMITIC	5.0 – 7.6	6.3
C18:0	STEARIC	2.7 – 6.5	4.6
C18:1	OLEIC	14.0 – 40.0	27.0
C18:2	LINOLEIC	50.0 – 74.0	62.0
C18:3	ALPHA LINOLENIC	<0.3	-
C20:0	ICOSANOIC	<1.0	0.5
C20:1	ICOSENOIC	<1.0	-
C22:0	DOCOSANOIC	<1.0	0.5

Manufacturer: BioPlant Natura Sp. z o.o., Ul. Pszeniczna 16 C, 15-597 Białystok, Poland, EU.