



IOI OLEOCHEMICAL

BASIC OLEO

WE DELIVER
**HIGH
QUALITY
BASIC
OLEO-
CHEMICALS**



IOI Oleo GmbH

Hamburg, Germany | +49 40 28 00 31-0
BasicOleo@ioioleo.de | www.ioioleo.de

IOI Oleo GmbH



WHO WE ARE



Selected raw materials, decades of experience and state-of-the-art production plants – it is this combination that makes our basic oleochemicals an ideal basis for your products. As experts in the production of short-chain and polyunsaturated fatty acids, we offer you high-quality basic products for the most diverse applications.

At our **Wittenberge site in Brandenburg**, we produce a broad range of multifunctional ingredients for a large variety of industries including food and feed, cosmetics, aromas and various technical applications.

The products in our WITARIX® brand are based entirely on vegetable raw materials and have excellent characteristics thanks to the particularly gentle production method.

However, we offer you more than just basic oleochemicals suitable for numerous applications. With our extensive know-how and high-performance technical equipment, we are able to guarantee our customers absolute reliability, maximum flexibility and a high level of availability for delivery. When it comes to meeting market requirements, we support you as a competent partner with expertise, creativity and commitment.



WITARIX[®] Le

POLY UNSATURATED FATTY ACIDS

Name: Linseed oil fatty acid
Cas-No.: 68424-45-3
Customs tariff code: 3823 19 10
Appearance: Liquid

Quality: Low trans, food complaint according to the EU regulation 1881/2006 and feed certified to the QS regulations

Application: Food, feed, flavors, paints & coating and other technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	195 - 205
Iodine Value	DGF C-V 11d	g I/100 g	183 - 200
Unsaponifiables	DGF C-III 1 a	%	<= 1.5
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 15
Lovibond 5 ¼" red	DGF C-IV 4		<= 2
Fatty acid C16	DGF C-VI 10 a	%	4 - 8
Fatty acid C18	DGF C-VI 10 a	%	2 - 5
Fatty acid C18:1	DGF C-VI 10 a	%	16 - 26
Fatty acid C18:2	DGF C-VI 10 a	%	14 - 22
Fatty acid C18:3	DGF C-VI 10 a	%	47 - 58
> Fatty acid C18	DGF C-VI 10 a	%	<= 2
Sum trans fatty acids	DGF C-VI 10 a	%	<= 2



WITARIX® Sb

POLY UNSATURATED FATTY ACIDS

Name: Sunflower oil fatty acid
Cas-No.: 84625-38-7
Customs tariff code: 3823 19 10
Appearance: Liquid

Quality: Low trans, food compliant according to the EU regulation 1881/2006

Application: Food, flavors, cosmetic, paints & coating and other technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	195 - 204
Iodine Value	DGF C-V 11d	g I/100 g	128 - 143
Unsaponifiables	DGF C-III 1 a	%	<= 1
Titre	DGF C-IV 3c	°C	15 - 25
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 10
Lovibond 5 ¼" red	DGF C-IV 4		<= 1.5
< Fatty acid C14	DGF C-VI 10 a	%	<= 2
Fatty acid C16	DGF C-VI 10 a	%	5 - 8
Fatty acid C18	DGF C-VI 10 a	%	2 - 6
Fatty acid C18:1	DGF C-VI 10 a	%	20 - 35
Fatty acid C18:2	DGF C-VI 10 a	%	55 - 68
Fatty acid C18:3	DGF C-VI 10 a	%	<= 2
> Fatty acid C18	DGF C-VI 10 a	%	<= 2
Sum trans fatty acids	DGF C-VI 10 a	%	<= 2



WITARIX® Ra

POLY UNSATURATED FATTY ACIDS

Name: Rapeseed oil fatty acid
Cas-No.: 93165-31-2
Customs tariff code: 3823 19 10
Appearance: Liquid

Quality: Low trans, food complaint according to the EU regulation 1881/2006 and feed certified to the QS regulations, non GMO

Application: Food, feed, cosmetic and technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	195 - 202
Iodine Value	DGF C-V 11d	g I/100 g	105 - 125
Unsaponifiables	DGF C-III 1 a	%	<= 1
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 1
Lovibond 5 ¼" red	DGF C-IV 4		<= 1.5
< Fatty acid C16	DGF C-VI 10 a	%	<= 1
Fatty acid C16	DGF C-VI 10 a	%	4 - 7
Fatty acid C16:1	DGF C-VI 10 a	%	<= 1
Fatty acid C18	DGF C-VI 10 a	%	<= 3
Fatty acid C18:1	DGF C-VI 10 a	%	53 - 65
Fatty acid C18:2	DGF C-VI 10 a	%	18 - 23
Fatty acid C18:3	DGF C-VI 10 a	%	6 - 12
> Fatty acid C18	DGF C-VI 10 a	%	<= 6
Sum trans fatty acids	DGF C-VI 10 a	%	<= 1



WITARIX® OLS 85

POLY UNSATURATED FATTY ACIDS

Name: High oleic sunflower oil fatty acid
Cas-No.: 112-80-1
Customs tariff code: 3823 19 10
Appearance: Liquid

Quality: Low trans, food compliant according to the EU regulation 1881/2006

Application: Food, flavors, cosmetic and technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	194 - 201
Iodine Value	DGF C-V 11d	g I/100 g	80 - 97
Unsaponifiables	DGF C-III 1 a	%	<= 1
Cloud point	DGF D-III 3	°C	<= 22
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 10
Lovibond 5 ¼" red	DGF C-IV 4		<= 1
<= Fatty acid C16	DGF C-VI 10 a	%	<= 6
Fatty acid C16:1	DGF C-VI 10 a	%	<= 1
Fatty acid C18	DGF C-VI 10 a	%	<= 6
Fatty acid C18:1	DGF C-VI 10 a	%	81 - 90
Fatty acid C18:2	DGF C-VI 10 a	%	<= 10
Fatty acid C18:3	DGF C-VI 10 a	%	<= 1
> Fatty acid C18	DGF C-VI 10 a	%	<= 2
Sum trans fatty acids	DGF C-VI 10 a	%	<= 1



WITARIX® LFS 75

POLY UNSATURATED FATTY ACIDS

Name: Safflower oil fatty acid
Cas-No.: 93165-34-5
Customs tariff code: 2916 15 00
Appearance: Liquid

Quality: Low trans, food compliant according to the EU regulation 1881/2006

Application: Cosmetic, flavor and technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	195 - 210
Iodine Value	DGF C-V 11d	g I/100 g	130 - 155
Peroxide value	DGF C-VI 6a	meq O2/kg	<= 5
Colour Gardner	DGF C-IV 4		<= 2
< Fatty acid C18	DGF C-VI 10 a	%	2 - 10
Fatty acid C18	DGF C-VI 10 a	%	<= 5
Fatty acid C18:1	DGF C-VI 10 a	%	8 - 16
Fatty acid C18:2	DGF C-VI 10 a	%	70 - 84
Fatty acid C18:3	DGF C-VI 10 a	%	<= 2
> Fatty acid C18	DGF C-VI 10 a	%	<= 2
Sum trans fatty acids	DGF C-VI 10 a	%	<= 1



WITARIX® C8/99

FATTY ACIDS

Name: Caprylic acid
Cas-No.: 124-07-2
Customs tariff code: 2915 90 70
Appearance: Liquid

Quality: Coconut, palm and RSPO MB, feed certified to the QS regulations

Application: MCT, feed, fragrances & flavors, cosmetics and technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	384 - 392
Saponification value	DGF C-V 3	mg KOH/g	384 - 393
Iodine value	DGF C-V 11 d	g I/100 g	<= 0.5
Unsaponifiables	DGF D-III 1 a	%	<= 0.5
Titre	DGF C-IV 3 c	°C	12 - 16
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 5
Lovibond 5 ¼" red	DGF C-IV 4		<= 0.5
Fatty acid C06	DGF C-VI 10 a	%	<= 1
Fatty acid C08	DGF C-VI 10 a	%	98 - 100
Fatty acid C10	DGF C-VI 10 a	%	<= 1



WITARIX® C8-10 Typ 1

FATTY ACIDS

Name: Caprylic - Capric acid

Cas-No.: 68937-75-7

Customs tariff code: 3823 19 10

Appearance: Liquid

Quality: Coconut, palm, organic (Ecocert), RSPO MB, food complaint according to the EU regulation 1881/2006 and feed certified to the QS regulations

Application: MCT, feed, fragrances & flavors, cosmetic and technical applications

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	354 - 365
Saponification value	DGF C-V 3	mg KOH/g	354 - 366
Iodine value	DGF C-V 11 d	g I/100 g	<= 0.5
Unsaponifiables	DGF D-III 1 a	%	<= 0.5
Titre	DGF C-IV 3 c	°C	1 - 5
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 2
Lovibond 5 ¼" red	DGF C-IV 4		<= 0.5
Fatty acid C06	DGF C-VI 10 a	%	<= 0.5
Fatty acid C08	DGF C-VI 10 a	%	53 - 63
Fatty acid C10	DGF C-VI 10 a	%	35 - 46
Fatty acid C12	DGF C-VI 10 a	%	<= 1.5



WITARIX® C12-18

FATTY ACIDS

Name: Fatty acid C12-18
Cas-No.: 90990-15-1
Customs tariff code: 3823 19 10
Appearance: Liquid

Quality: Coconut, organic (Ecocert)

Application: Cosmetic

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	250 - 263
Saponification value	DGF C-V 3	mg KOH/g	250 - 264
Iodine value	DGF C-V 11 d	g I/100 g	6 - 13
Unsaponifiables	DGF D-III 1 a	%	<= 1
Titre	DGF C-IV 3 c	°C	23 - 30
Lovibond 5 ¼" yellow	DGF C-IV 4		<= 5
Lovibond 5 ¼" red	DGF C-IV 4		<= 1
<= Fatty acid C10	DGF C-VI 10 a	%	<= 2
Fatty acid C12	DGF C-VI 10 a	%	50 - 62
Fatty acid C14	DGF C-VI 10 a	%	18 - 25
Fatty acid C16	DGF C-VI 10 a	%	7 - 14
Fatty acid C18	DGF C-VI 10 a	%	<= 5
Fatty acid C18:1	DGF C-VI 10 a	%	4 - 14
Fatty acid C18:2	DGF C-VI 10 a	%	<= 3
> Fatty acid C18	DGF C-VI 10 a	%	<= 1



WITARIX® split Glycerin 80

GLYCERIN

Name: Split Glycerin 80

Cas-No.: 56-81-5

Customs tariff code: 1520 00 00

Appearance: Liquid

Quality: Vegetable, non palm and non GMO

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Glycerol content iodometric	DGF E-III 3 b	%	>= 80
Ash	DGF E-III 4	%	<= 2
Water content	DGF C-III 13 a	%	<= 20
MONG	DGF E-III 9 a	%	<= 3



WITARIX® GC312

MONOGLYCERID

Name: Monoglycerid C3-C12
Customs tariff code: 3824 99 55
Appearance: Liquid

Quality: Feed material according to 13.028 of the GMP+ list of products

Application: Feed

Specification:

CHARACTERISTIC	INSPECTION METHOD	UNIT	SPECIFIED RANGE
Acid value	DGF C-V 2	mg KOH/g	<= 3
Glycerol	AAWBAN401085	%	<= 30
Monoglycerides	AAWBAN401085	%	>= 40