

## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038A10320

Best Before: January, 2023

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4707
Specific gravity:	0.900 - 0.920 @ 20°C	0.902
Peroxide Value:	< 0.8 meq/kg	0.20
Saponification Value:	160 - 175 mg KOH/g	167.99
Unsaponifiable Matter:	< 1.5 %	0.39
Free Fatty Acid:	-----	0.02 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	61.3
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.5
Erucic Acid, (C22:1 d13):	10 - 15 %	14.0
Docosanoic Acid (C22:1 d5):	3 - 6 %	4.1

#### Disclaimer & Caution

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038A10919

Best Before: April, 2022

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4696
Specific gravity:	0.900 - 0.920 @ 20°C	0.901
Peroxide Value:	< 0.8 meq/kg	0.34
Saponification Value:	160 - 175 mg KOH/g	169.28
Unsaponifiable Matter:	< 1.5 %	0.46
Free Fatty Acid:	-----	0.05 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.8
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.3
Erucic Acid, (C22:1 d13):	10 - 15 %	12.5
Docosanoic Acid (C22:1 d5):	3 - 6 %	4.1

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038A20519

Best Before: March, 2022

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4715
Specific gravity:	0.900 - 0.920 @ 20°C	0.900
Peroxide Value:	< 0.8 meq/kg	0.40
Saponification Value:	160 - 175 mg KOH/g	170.68
Unsaponifiable Matter:	< 1.5 %	0.41
Free Fatty Acid:	-----	0.03 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.0
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.3
Erucic Acid, (C22:1 d13):	10 - 15 %	12.8
Docosanoic Acid (C22:1 d5):	3 - 6 %	4.2

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038A10519

Best Before: January, 2022

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4709
Specific gravity:	0.900 - 0.920 @ 20°C	0.901
Peroxide Value:	< 0.8 meq/kg	0.20
Saponification Value:	160 - 175 mg KOH/g	168.13
Unsaponifiable Matter:	< 1.5 %	0.37
Free Fatty Acid:	-----	0.04 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	64.0
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.3
Erucic Acid, (C22:1 d13):	10 - 15 %	12.8
Docosanoic Acid (C22:1 d5):	3 - 6 %	4.3

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038-A53

Best Before: September, 2021

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4706
Specific gravity:	0.900 - 0.920 @ 25°C	0.901
Peroxide Value:	< 0.8 meq/kg	0.0
Saponification Value:	160 - 175 mg KOH/g	170.68
Unsaponifiable Matter:	< 1.5 %	0.52
Free Fatty Acid:	-----	0.03 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.4
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.2
Erucic Acid, (C22:1 d13):	10 - 15 %	12.8
Docosanoic Acid (C22:1 d5):	3 - 6 %	4.2

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038-A52

Best Before: July, 2021

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4710
Specific gravity:	0.900 - 0.920 @ 25°C	0.901
Peroxide Value:	< 0.8 meq/kg	0.0
Saponification Value:	160 - 175 mg KOH/g	168.30
Unsaponifiable Matter:	< 1.5 %	0.54
Free Fatty Acid:	-----	0.02 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.7
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.3
Erucic Acid, (C22:1 d13):	10 - 15 %	13.0
Docosanoic Acid (C22:1 d5):	3 - 6 %	4.3

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038-A51,B51,C51

Best Before: March, 2021

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4714
Specific gravity:	0.900 - 0.920 @ 25°C	0.904
Peroxide Value:	< 0.8 meq/kg	0.10
Saponification Value:	160 - 175 mg KOH/g	168.47
Unsaponifiable Matter:	< 1.5 %	0.36
Free Fatty Acid:	-----	0.03 % as oleic acid

### Fatty Acid Profile

Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.5
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.4
Erucic Acid, (C22:1 d5):	10 - 15 %	12.5
Docosanoic Acid (C22:1 d13):	3 - 6 %	4.2

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038-A50,B50,C50

Best Before: November, 2020

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.4706
Specific gravity:	0.900 - 0.920 @ 25°C	0.903
Peroxide Value:	< 0.8 meq/kg	0.10
Saponification Value:	160 - 175 mg KOH/g	169.36
Unsaponifiable Matter:	< 1.5 %	0.60
Free Fatty Acid:	-----	0.04 % as oleic acid
<u>Fatty Acid Profile</u>		
Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.8
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.4
Erucic Acid, (C22:1 d5):	10 - 15 %	12.4
Docosanoic Acid (C22:1 d13):	3 - 6 %	4.2

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## CERTIFICATE OF ANALYSIS

Product: Meadowfoam Carrier Oil

Lot No: 15038-A49,B49,C49

Best Before: August, 2020

Store in an air tight container; in a cool dry area; away from direct sunlight.

<u>Properties</u>	<u>Specifications</u>	<u>Results</u>
Appearance:	Clear, yellow liquid @ 20°C	Complies
Odor:	Characteristic neutral odor.	Complies
Refractive Index:	1.465 - 1.475 @ 25°C	1.470
Specific gravity:	0.900 - 0.920 @ 25°C	0.904
Peroxide Value:	< 0.8 meq/kg	0.10
Saponification Value:	160 - 175 mg KOH/g	164.88
Unsaponifiable Matter:	< 1.5 %	0.60
Free Fatty Acid:	-----	0.04 % as oleic acid
<u>Fatty Acid Profile</u>		
Cis-5-eicosenoic Acid (C20:1 d5):	58 - 65 %	63.7
Cis-5, c-13-docosadienoic Acid (c22:2 d5 d13):	14 - 21 %	16.1
Erucic Acid, (C22:1 d5):	10 - 15 %	12.7
Docosanoic Acid (C22:1 d13):	3 - 6 %	4.3

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