

INCI Name	Percentage	CAS	EINECS
Avena sativa Kernel Oil	100%	84012-26-0	281-672-4



Oat* Lipid e has excellent absorbency and protective properties, enhancing skin feel, moisturising and soothing the skin.

Oat[®] Lipid e is a natural oil containing approximately 10% polar lipids. Rich in skin identical lipids, powerful anti-oxidants, skin active ceramides and membrane phospholipids, it is an excellent addition to cosmetic formulations to provide reparative and protection properties.

Oat[®] Lipid e has a high linoleic acid content recognised as establishing and maintaining the epidermal water barrier thereby improving skin barrier function. Additionally this multifunctional oil contains antioxidants including the alkyl phenolates and Vitamin E in the form of tocotrienols and tocopherols, to protect skin lipids from free radical induce peroxidation.

Ceramides, Phosphatidylcholine [PC] and Phosphatidylethanolamine [PE] are membrane-identical phospholipids contained within Oat[®] Lipid e which support the barrier function helping to keep skin in a healthy condition, slow down skin aging, maintain the stratum corneum and act as a penetration enhancers.

Oat[®] Lipid e is easy to formulate, and provides superior benefits to most other oils used in skin care.

Ingredient Properties

- Clear golden colour
- Mild natural odour
- High Linoleic acid content
- High Omega-3 and Omega-6 fatty acid content
- High levels of anti-oxidants
- Significant ceramide content
- Good stability
- EU approved as a safe oil
- ECOCERT / COSMOS Natural approved

Application Benefits

- Clear oil - easy to formulate
- Excellent skin absorbency resulting in a non-greasy skin feel
- Wide temperature range for incorporation in formulations
- Skin repair capability
- No dermal irritation and sensitivity
- Effective emollient
- Excellent for use in baby, moisturising and anti-aging , sun-care, tanning products and bath oils.
- Typical inclusion rate: 1% - 10%

* OAT[®] is the international registered trade mark of Oat Services Limited under numbers: EU008688749

Oat® Lipid e has the following composition:

Lipid Class Composition	Total Lipid %	
Total Neutral Lipids:		90.0%
<i>Of which</i>		
Triacylglycerols:	59.5%	
Cholesterol/Sterols:	11.8%	
Other:	18.7%	
Total Polar Lipids:		10.0%
<i>Of which</i>		
MGDG / DGDG:	3.1%	
Ceramides:	1.2%	
Phosphatidylcholine [PC]:	1.0%	
Phosphatidylethanolamine [PE]:	0.7%	
Other:	4.0%	

Fatty Acid Composition	Breakdown %	Total %
Total Saturated:		16.8%
Total Monosaturated:		43.8%
Total Polyunsaturated:		39.4%
<i>Of which</i>		
Omega 6 Omega Fatty Acids:	38.0%	
Omega 3 Omega Fatty Acids:	1.4%	

Formulating with Oat® Lipid e

Oat® Lipid e is easy to formulate with. It is versatile for use in various applications: skin care, hair care, body care, sun care, decorative cosmetics and personal care. It is incorporated into products during the oil phase addition.

Twin Oat BB Cream

Multi-functional twin oat BB cream, giving a make up effect light cream. The inclusion of [Oat® SILK 12](#) and [Oat® Lipid e](#) provide skin-care benefits and give a bright, even and mattified

Formulation Suggestion:

1. Add materials from phase A to the water with stirring and heat to 70°C
2. In a separate vessel, premix phase B and heat to 70°C until melted and uniform
3. Add phase C to phase B with high speed stirring
4. Use a homogeniser and add the combined phase C and B to phase A and shear for 2-3 minutes until uniform
5. Add phase D and continue to shear until the emulsion is viscous, bright and uniform
6. Commence cooling with constant stirring to ambient temperature
7. Make to weight with purified water, record pH and viscosity

Phase	Ingredient	Supplier	% w/w
A	Oat® SILK 12	Oat® Cosmetics	2.00
	Disodium EDTA	Various	0.05
	Glycerin	Various	3.00
	Euxyl PE9010	Schulke & Mayr	1.00
	Purified water		to 100.00
B	Crodamol AB	Croda	6.00
	Oat® Lipid e	Oat® Cosmetics	4.00
	DC200 silicone fluid	Dow Corning	1.00
	Glucamate SSE20	Lubrizol	4.50
	Glucate SS Emul	Lubrizol	4.50
	Crodacol S95	Croda	1.00
C	Unipure Yellow LC 182 AS-EM	Sensient	0.48
	Unipure Red LC 381 AS-EM	Sensient	0.15
	Unipure Black LC 989 AS-EM	Sensient	0.03
	SunCROMA TiO2 (C47060)	Sun Chemical	2.40
D	Simulgel EG	Air Liquide	0.60

For more formulation ideas download our [formulation ebook](#) from our website <http://oatcosmetics.com/formulation-ideas/>

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