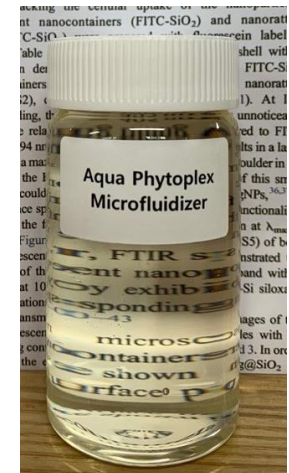


Aqua Oil Series

Product	INCI	Remarks
AQUA PHYTOPLEX	Glycerin, Limnanthes alba(Meadowfoam) Seed Oil , Canola Oil , Helianthus Annuus (SUNFLOWER) Seed Oil , Argania Spinosa Kernel Oil , Polyglyceryl-10 Stearate	Oil 30% inside Nano Emulsion
AQUA SHEA BUTTER	Glycerin, Butyrospermum parkii (shea) butter oil , Polyglyceryl-10 Stearate	Emulsion Droplet size about 120nm
AQUA CCTG	Glycerin, Capric/caprylic triglyceride , Water Polyglyceryl-10 Stearate	
AQUA ARGAN	Glycerin, Argania Spinosa Kernel Oil , Polyglyceryl-10 Stearate	
AQUA PHYTOSQUALANE	Glycerin, Squalane , Polyglyceryl-10 Stearate	
AQUA MEADOWFOAM	Glycerin, Limnanthes alba (Meadowfoam) Seed Oil , Polyglyceryl-10 Stearate	

Clean Beauty Concept, COSMOS

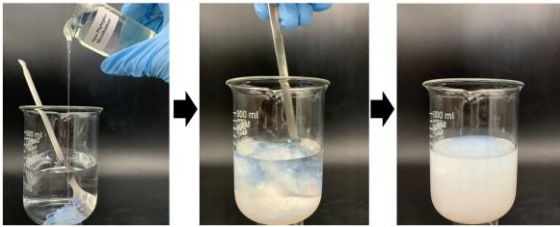
- PEG & PPG Free
- GMO Free(No Lecithin)
- No water inside, can't be frozen during storage(Water slightly for Aqua CCTG)
- No Preservative inside
- Self emulsification, easily can be incorporated to water phase by simple mixing



Aqua Oil Overview

Overview

AQUA Oil series are translucent **nano-emulsions** which allow for the **incorporation of moisturizing natural oils into water phase** by simple stirring without special high shear homogenizer such as microfluidizer.



Benefits

- **Self emulsifiable**, Cold Processable, Cost efficient
- **COSMOS**
- **PEG-free and PPG-free**, so a perfect ingredient when formulating for CLEAN BEAUTY
- The natural oils content in AQUA PHYTOPLEX is 30% total and includes Meadowfoam Seed Oil, Argan Oil, Canola Oil and Sunflower Seed Oil. Meadowfoam Seed Oil and Argan Oil are well-known for many benefits including skin hydration and the prevention of moisture loss. Sunflower Seed Oil and Canola Oil provide aesthetic benefits and maintain the cost effectiveness of AQUA PHYTOPLEX.

Formulation Tips

AQUA PHYTOPLEX is easy to use and stable in formulations at high dilution levels. **Simple mixing at room temperature** can produce a wide range of formulations including cream toners, serums, cleansers, gel creams, sprayable products, and the liquids for sheet masks and make-up wipe

Aqua Oils

Formulation types



Aqua Phyto
series



Easy to disperse
in water



INCI: Glycerin (and) Limnanthes alba (Meadowfoam) Seed Oil (and) Canola Oil (and) Helianthus Annuus (SUNFLOWER) Seed Oil (and) Argania Spinosa Kernel Oil (and) Polyglyceryl-10 Stearate

CAS #: 56-81-5 & 153065-40-8 & 120962-03-0 & 8001-21-6 & 223747-87-3 & 79777-30-3

The Benefits of 120nm Emulsion

The **nano-emulsion technology** used for AQUA PHYTOPLEX allows for fast delivery and absorption of the natural oils into the upper layers of the skin providing enhanced miniaturization and reduction of TEWL.

The average droplet size of the emulsion is 120 nanometers. Formulations containing AQUA PHYTOPLEX have a slight bluish appearance and a light texture.

Nano emulsion is superior!

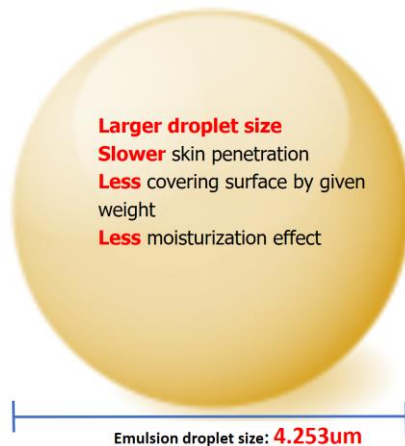
Nano Emulsion

Size of Emulsion by Aqua
Phytoplex: **0.118um**

Smaller droplet size
Faster skin penetration
Larger covering surface by given weight
Better prevention of moisture evaporation



Typical Macro Emulsion



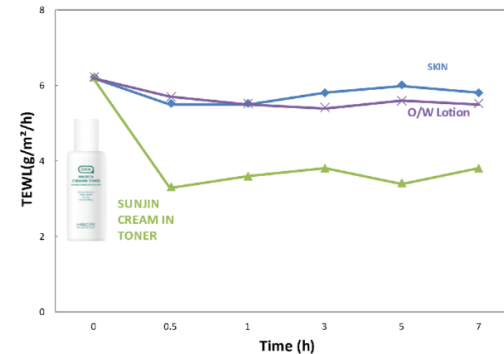
The small droplet size provides a **large surface area** and uniform distribution on the skin, **good occlusiveness**, film formation, aesthetic qualities and skin feel

MOISTURIZING EFFECT STUDY

An AQUA PHYTOPLEX cream-in-toner formulation containing 10% AQUA PHYTOPLEX (3% total natural oils) and a commercial o/w emulsion formulation containing 15% emollients were evaluated in an in-house moisturizing effect study.

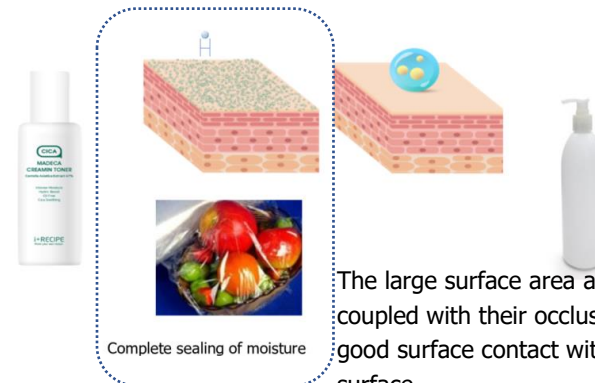
Moisturizing Effect

In vivo measurement of **TEWL**
(Transepidermal water loss)



During the seven hours of the study, the AQUA PHYTOPLEX formulation reduced TEWL by approximately 30% throughout the duration of the study.

Theory: Better prevention of moisture evaporation



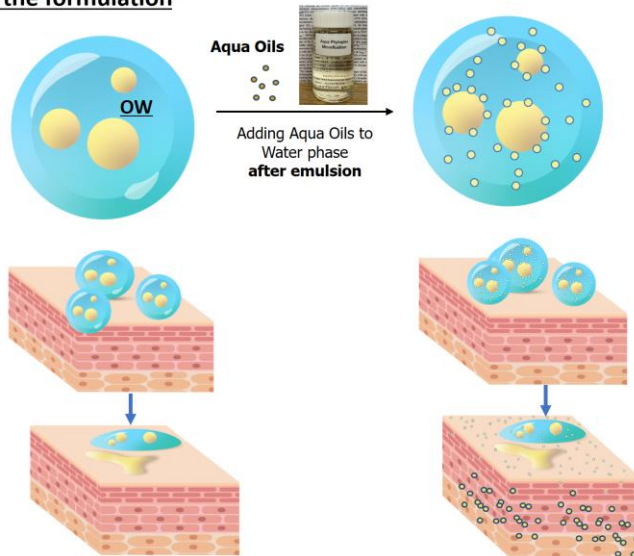
The large surface area and good skin contact coupled with their occlusive nature ensures good surface contact with the stratum corneum surface.

Add-in after emulsification

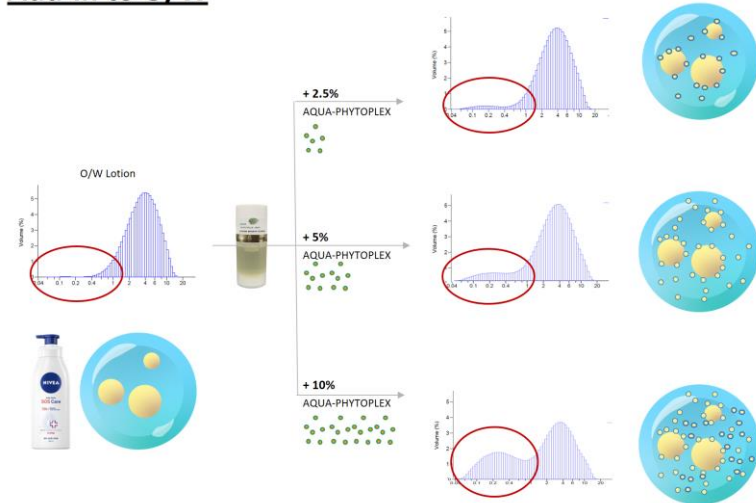
To improve the performance of current formulations, AQUA PHYTOPLEX can be used as an **ADD-IN**.

The nano-emulsion will incorporate into the formulation and upon application to the skin improve emulsion coverage. Simply stirring in AQUA PHYTOPLEX can result in improvements to sensory feel and moisturization.

Aqua oils can be added after emulsion formation to enhance the formulation



Add-in to O/W



Proposal from SUNJIN

