

CUSTOMIZED
SOLUTIONS

Schill+Seilacher
struktol®



EMULSIFIER

PAIR2PHASE-SERIES

PAIR2PHASE PRODUCTS ARE ANIONIC O/W EMULSIFIERS FOR COSMETIC PREPARATIONS LEADING TO OUTSTANDING SKIN FEEL AND ROBUSTNESS FOR CREAMS AND LOTIONS.

The combination of Potassium Cetyl Phosphate with different waxes provides additional benefits for leave-on applications. Pair2Phase allows sun care formulations to achieve water resistance. Potassium Cetyl Phosphate regulates humidity on the skin due to its phospholipid analogues driving force to form a lamellar structured permeable membrane on skin.

- **COSMOS and NaTrue certified**
- **Easy to incorporate after heating**
- **Gives robustness to oil in water emulsions**
- **Humectant abilities**
- **Free from preservatives and fragrances**
- **PEG-free, EO-free, Sulphate-free**
- **Outstanding skin feel without stickiness**
- **Concentration of use: 0.5- 5%**

Product name	INCI	Appearance	PO / PKO	Remarks
Pair2Phase1 Pair2Phase1 MB*	Potassium Cetyl Phosphate, Behenyl Alcohol	White-beige flakes	0 / 39	COSMOS, NaTrue
Pair2Phase2 Pair2Phase2 MB*	Potassium Cetyl Phosphate, Oryza Sativa Bran Cera	Yellow-amber flakes	0 / 39	COSMOS, NaTrue

* Mass Balance

BODY LOTION

Part	INCI / Ingredient	% W/W
A	Aqua	81.00
	Glycerin	2.00
	PAIR2PHASE1 MB Potassium Cetyl Phosphate (and) Behenyl Alcohol	2.50
B	Dicaprylyl Carbonate	4.50
	Macadamia Ternifolia Seed Oil	4.00
	Squalane	3.00
	Glyceryl Oleate	3.00
C	Citric Acid	qs to pH
D	Preservatives, Fragrances, etc.	qs

Manufacturing Procedure:

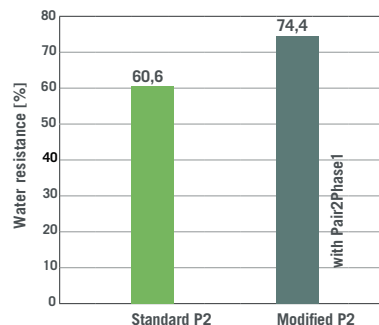
- Heat part **A** to 75 °C
- Heat part **B** to 75 °C
- Add part **B** to part **A** and mix until formulation appears homogenous
- Cool down to room temperature
- Adjust pH value with part **C**
- Add part **D**

Property

- Appearance: white cream
- pH-value: 5.5

IN VIVO TEST

Emulsifiers of COLIPA standard sun screen formula (P2) were exchanged with Pair2Phase1 to give the Modified P2 cream. Standard and Modified were investigated according to the COLIPA guideline (2005) for water resistance testing. The Modified P2 achieved a water resistance value of 74.7 %. This result was significant higher than the obtained result of 60.6 % regarding Standard P2. This shows that it is very easy to develop formulations which will pass the required 50 % borderline to market water resistant claims.



APPLICATION

- Creams
- Lotions
- Skin and body care
- Sun care formulations
- Cleaning products based on emulsions
- Personal hygiene products

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