ZSCHIMMER & SCHWARZ

HARKE Home & PersonalCare

SkinCare

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LUMOROL K 1000 & K 5229
Surfactant Blend for Oil Foam Baths and Shower Oils

May 2023

Bath/Shower Oils & Bath Milks

Unlike conventional bath foam, bath or shower oils do not contain foaming surfactants, which is why they are particularly recommended for sensitive and dry skin. The skin layers are supplied with many important nutrients as well as moisture and the natural protective barrier is strengthened, which, among other things, prevents premature skin ageing and provides a soft and pleasant skin feeling after the well-deserved full bath.

Lumerol K series from our partner Zschimmer & Schwarz providing spontaneous dispersing of bath oils with a direct " blooming effect" and a very white/turbid emulsion without stirring.

Content

What are LUMOROLs?

LUMOROL is the trade name for compounds of surfactants of Zschimmer & Schwarz.

What are the advantages of compounds?

- Balanced ingredients
- Optimised application properties
- Simple development and manufacturing of cosmetic finished products

Benefits of using LUMOROLs

- One raw material instead of several single surfactants
- Optimised chemical composition
- Well-balanced application properties
- Saving of shipping and storage capacity and corresponding costs (logistics)
- Pumpable without problems
- Easy manufacturing of finish products (time saving)

Products for Water-Free Formulation Concepts

LUMOROL K 1000	
Product data	
INCI	Laureth-4, MIPA-Laureth Sulfate, Cocamide DEA
Concentration	36% anionic active matter
Appearance:	clear, yellow liquid at 25°C

LUMOROL K 5229	
Product data	
INCI	Laureth-4, MIPA-Laureth Sulfate, Propylene Glycol
Concentration	43% anionic active matter
Appearance:	clear, yellow liquid at 25°C

Properties and benefits

- Water-free blend of anionic and nonionic surfactants
- Developed for water-free formulations (shower oils, bath oils)
- The dilution in water causes a O/W emulsion
- Clear formulations can be achieved with almost all cosmetic oils
- Good foaming properties can be achieved

Formulation Examples

Basic formulation for a shower oil or a bath oil

Oils:

Vegetable oils, mineral oils or combinations (e.g. Soybean oil and/or Mineral oil)	30 – 60%

Surfactants/Emulsifiers:

LUMOROL K 1000 or LUMOROL K 5229	30 – 60%

Additives:

Perfume	2 – 5%
Additives	q.s.
Antioxidant	q.s.

LUMOROL K 1000:
Milky oil foam bath (ZS_PCL_71_127)

Claim: foaming, water-free

Appearance: yellow, clear, low viscous oily liquid

Phase	Ingredients	INCI	w/w%	Supplier
A	LUMOROL K 1000	Laureth-4, MIPA-Laureth Sulfate, Cocamide DEA	28.0	Z & S
	Paraffin oil	Mineral oil	26.0	
	Isopropyl palmitate	Isopropyl Palmitate	15.5	
	Sunflower oil	Helianthus Annuus (Sunflower) seed oil	14.5	
	Castor oil	Ricinus Communis (Castor) seed oil	7.0	
	Antioxidant	…	q.s.	
	Perfume	Parfum (fragrance)	5.0	
	MULSIFAN CPA	Laureth-4	3.0	Z & S
	Propylene Glycol	Propylene Glycol	1.0	

LUMOROL K 5229:
Dead Sea Salt & Oil Body Scrub (ZS_PCL_71_144)

Claim: water-free, salt from the dead sea for peeling effect, turns into a white gently foaming emulsion under the shower

Appearance: translucent, high viscous gel, with salt particles

Phase	Ingredients	INCI	w/w%	Supplier
A	Castor oil	Ricinus Communis (Castor) seed oil	up to 100.0	
	Hydrogenated castor oil	Hydrogenated Castor oil	2.0	
B	Antioxidant	…	q.s.	
	Emollient, solvent and dispersant	Propylene Glycol Dicaprylate/Dicaprate, Stearalkonium Hectorite, Propylene Carbonate	12.0	
C	LUMOROL K 5229	Laureth-4, MIPA-Laureth Sulfate, Propylene Glycol	28.8	Z & S
	Dead sea salt	Maris Sal	10.0	
	OXYPON 401	PEG-9 Cocoglycerides	2.7	Z & S
	Perfume	Parfum (fragrance)	0.5	
	Dyestuff (oil soluble)	…	q.s.	

Bath Oil Dispersing Properties

Spontaneous dispersion

- white "blooming" effect directly
- spontaneous emulsification without stirring
- resulting emulsion very white/turbid

How to formulate a "blooming" bath oil

To formulate a "blooming" bath oil:

- Very potent emulsifying system is required
- Good matching of oil, emulsifier and surfactant is essential
- The resulting emulsion should not be too viscous in the first dilution step

LUMOROL K 1000 & K 5229: Conclusions

- Water-free blend of anionic and nonionic surfactants
- One raw material instead of several single surfactants
- For water-free formulations (shower oils)
- Dilution in water causes a O/W emulsion
- "Blooming" effect
- LUMOROL K 5229: free of Cocamide DEA
- Both products are also available in RSPO-MB quality

HARKE Home & PersonalCare

Imprint

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