

“Your Best Natural Look” Mousse Mascara

A long-lasting, water-resistant and smudge-resistant mousse mascara which provides a natural-looking eyelash. A natural oil-based film contributed by **OleoFlex FG 100 and EG 200** is formed on an eyelash which is soft and “super flexible” so that it helps increasing water resistance; smudge-resistance and long wear (Fig.1). This "flexible" feature is important in giving a natural looking for the eyelashes, and helps this mascara catch up with the "Natural Look"-trends in modern color cosmetics.

Not only has a unique mousse texture, this mascara also exhibits the characteristic sensorial profile of mousse – soft, light, and completely non-tacky. **Sensogel 200** strongly contributes to this lighter, softer and non-tacky sensory that cannot be replicated in denser, high-wax emulsions. Due to this unique texture, the mascara brings consumers a lighter feeling on their eyelashes, and helps preventing the eyelashes to stick together and reducing clumps.

In combination with certain fibers, the mascara helps increasing volume and length of the eyelashes while still keeping that natural look.

- **OleoFlex FG 100:** A honey-like flowing gel
- **OleoFlex EG 200:** An elastomeric gel and a film former
Both help building the consistency of the oil phase, especially the natural oils, with a micro-sponge structure. It forms a **flexible, natural oil-based film** on skin, hair or eyelashes, sealing the moisture, increasing water resistance and long wear, and giving natural looking for hair or eyelashes.
- **Sensogel 200:** 3-in-1 stable and ready-to-use associative thickener that can work as emulsifier, stabilizer, and thickener for a wide range of **pH (2 – 12)** in O/W sunscreen preparation with a reduced amount of emulsifiers to provide light and **quick-absorbing** sensory and a range of **texture** from spray, to lotion, cream, and to butter texture. Also able to **thicken** 99% **Glycerin** with 1% Sensogel 200, making a water-soluble, petroleum-like viscous paste with non-tacky sensory. Designed for skin care, sun care and hair conditioner.

Part	INCI Name, (Trade Name)	Wt %
A	Water	32.37
	Disodium EDTA	0.10
	Sensogel SG-200	3.00
B	"Black pigment stock"	13.33
	OleoFlex FG-100	10.0
	OleoFlex EG-200	10.0
	Polyethylene	2.00
	Ozokerite	3.00
	Isododecane	20.0
	Glycerin Monostearate	2.00
	Ceteareth-20	3.00
Tocopherol	0.40	
C	Preservatives	0.80

Process:

1. Mix A by a propeller (1000 rpm, 5 minutes) until homogenous.
2. Heat A and B separately up to 80~85 C.
3. Pour B into A while mixing by a propeller at 1500 rpm. Continue mixing for 10 ~ 15 minutes.
4. Cool down to 50 C. Add C and discharge.



Before washing by water After washing by water (~ 30 seconds)

Figure 1 - Comparison of water-resistance between Tarte 4-in-1 mascara and Applechem mascara using OleoFlex

*"Black Pigment stock base" for Mascara!
A Stable 75% black iron oxide stock paste*

This stable and cost-effective pigment stock base with 75% by weight of black iron oxide is made of three major ingredients: non-surface coated black iron oxide, Applecare PDS 300, and OleoFlex FG 100. Every one kg of it is good for making 7 – 9 Kg of the finished mascara.

OleoFlex FG 100: A film former with honey-like flowing rheology, made of natural oil and a special block copolymer. It encases pigment particles, increasing the stability of pigment stock.

AppleCare PDS 300: COSMOS- approved, easy-to-use, completely natural pigment dispersion system, capable of dispersing cost-effective, virgin, non-surface coated pigments in oil at high dosage, while converting the pigment surface to hydrophobic surface, resulting in an increased water & wear resistance, bright, intense, homogenous color throughout the make-up. The usage level is only **5-8 % of the total pigment weight**.

<i>INCI Name, (Trade Name)</i>	<i>Wt %</i>
Black Iron oxide	75.0
Yellow carnauba wax	2.40
OleoFlex FG 100	19.0
AppleCare PDS 300	3.60

Pigment Stock Dispersion Preparation Process:

1. Heat up Carnuba wax, PDS-300 and Oleoflex FG 100 at 150 C until homogenous to have a pre-mix.
2. Add black iron oxide into the pre-mix while mixing by a propeller with a dispersion blade at ~80 C and 1000~2000 rpm for 5-10 minutes.

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