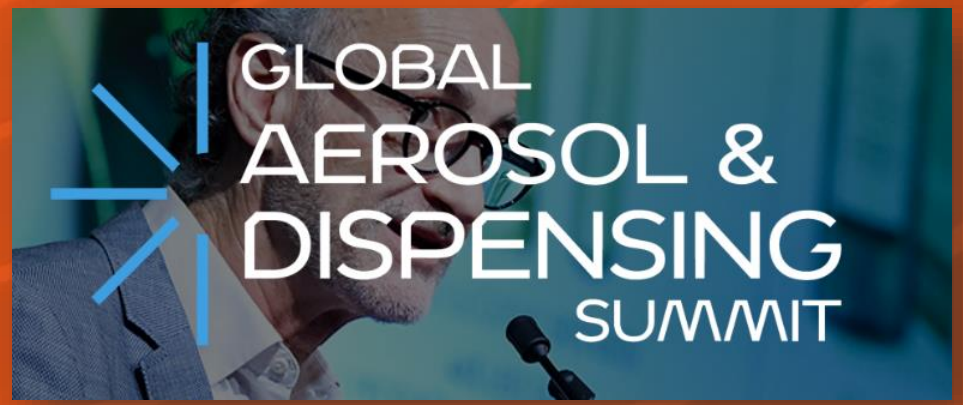
BEYOND THE MIST

Elevating Experiences with Aerosol Innovation

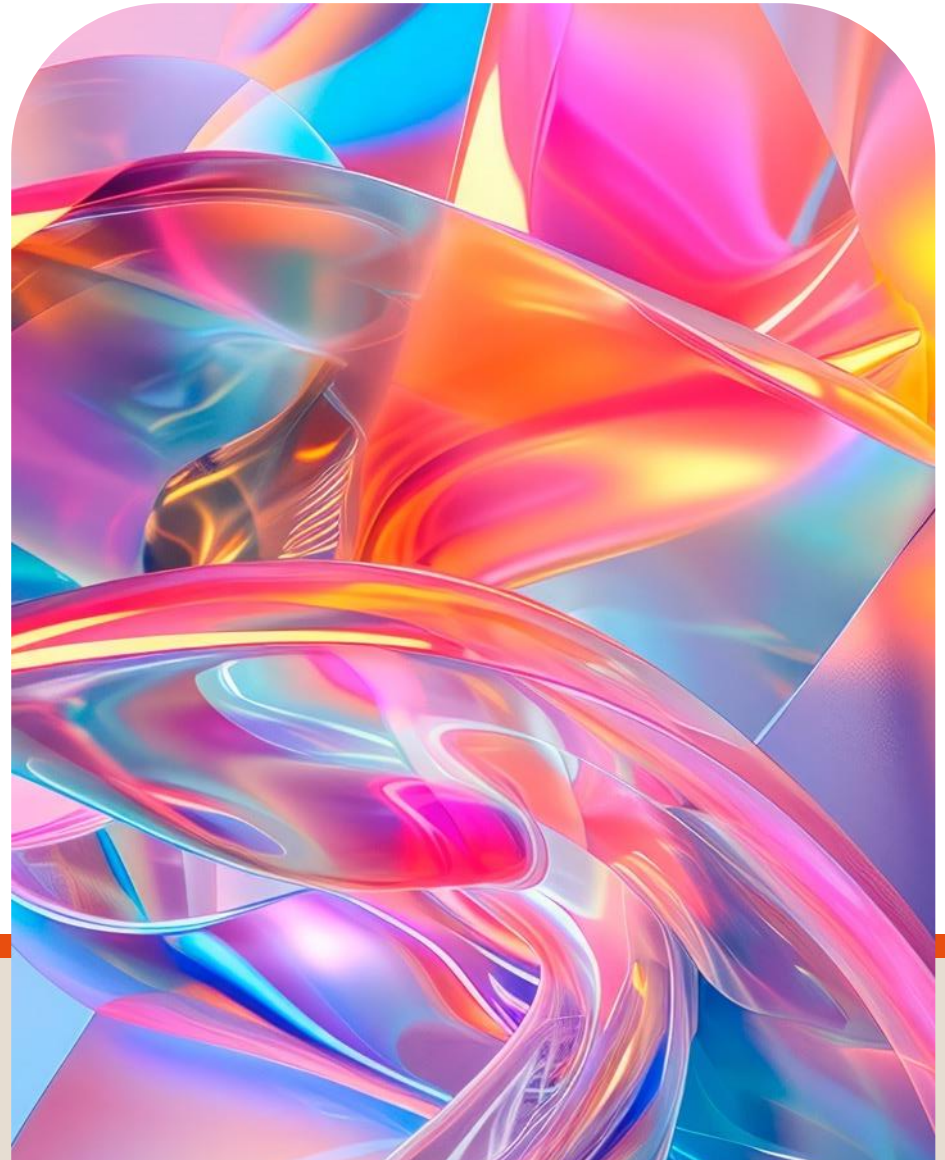
Cláudia Silva, R&D Director @ Colep CP



Paris, 29th January, 2025

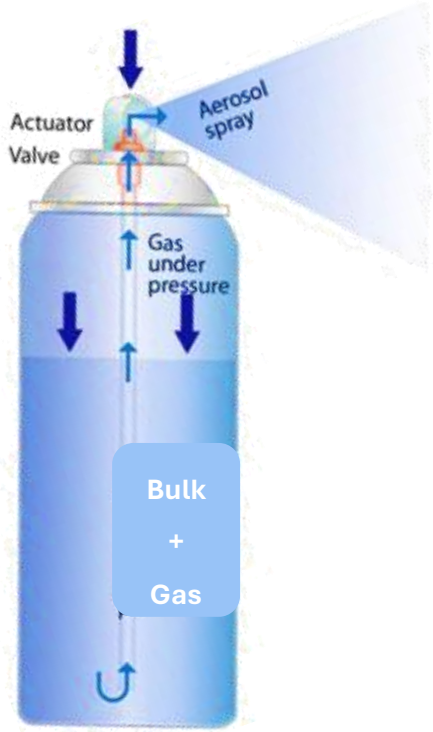
AGENDA

- The unique Science of Aerosols
- Beyond the mist: aerosol product Innovation
- Is sustainability a threat or an opportunity for aerosol product Innovation?
- To conclude…..

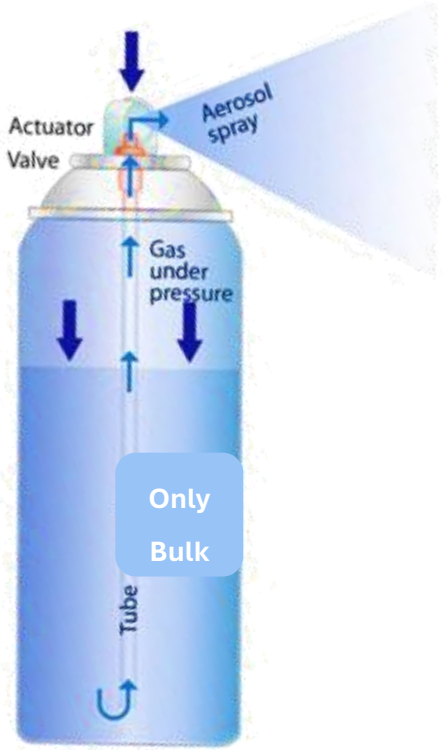


THE UNIQUE SCIENCE OF AEROSOLS

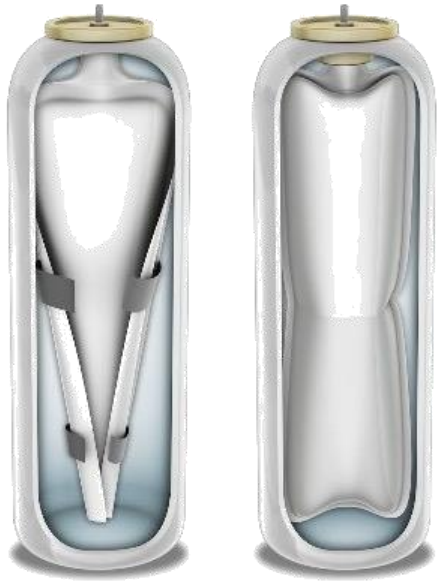
Main components



Standard aerosol



Compressed aerosol



Bag on valve aerosol

www.aerosol.org/about-aerosols/

THE UNIQUE SCIENCE OF AEROSOLS

COSMETICS ARE MULTISENSORY IN NATURE:

The multisensory attributes of the products when they are applied can exert many different effects on an individual mood, their emotions, sense of comfort and sense of well-being.

The scent, visual appearance, the pleasantness of tactile properties and the sound have a huge impact on customer experience and on the decision to buy a product.

Multiple components

Higher complexity but also…..multiple possibilities to “play” to create different sensorials

- Multi-formats
- Sensory additivity
- Novel sensorial experiences that elevate and enrich user experience

RESULT:

+ Product differentiation

+ Value creation (consumers and brands)

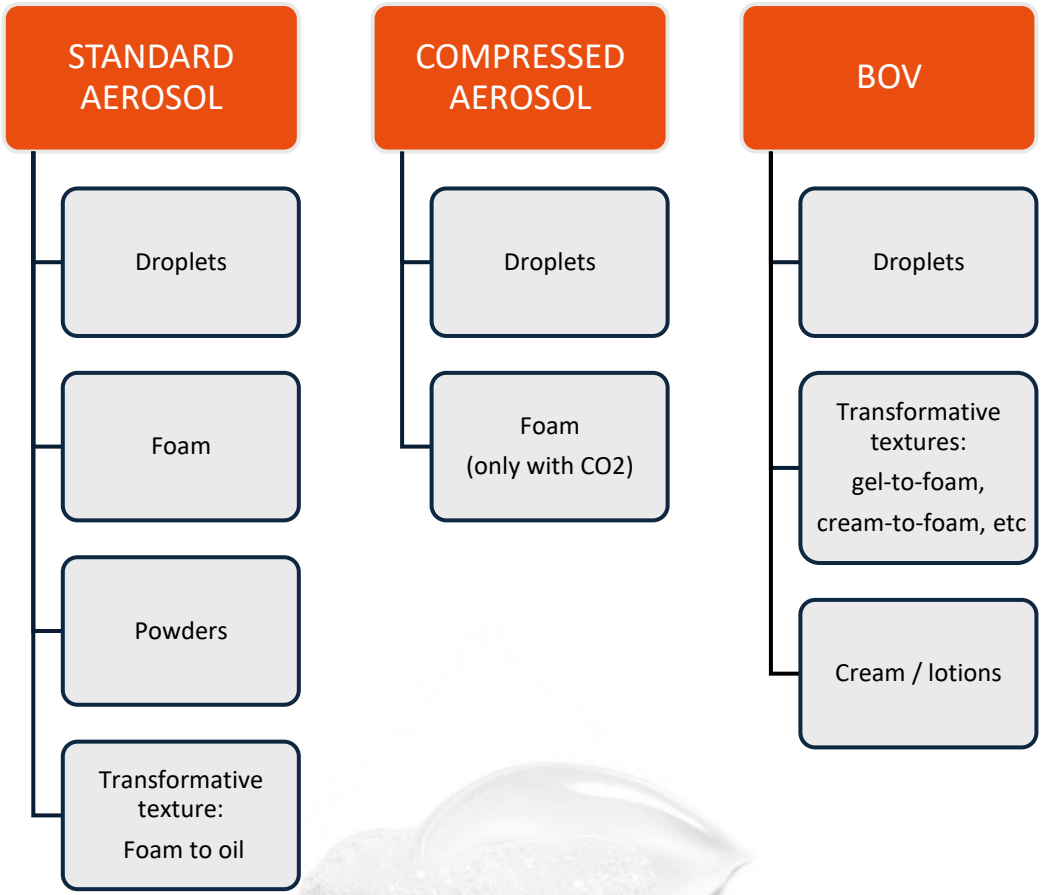
+ Repeat purchase

SENSORIAL: TYPE OF TEXTURE

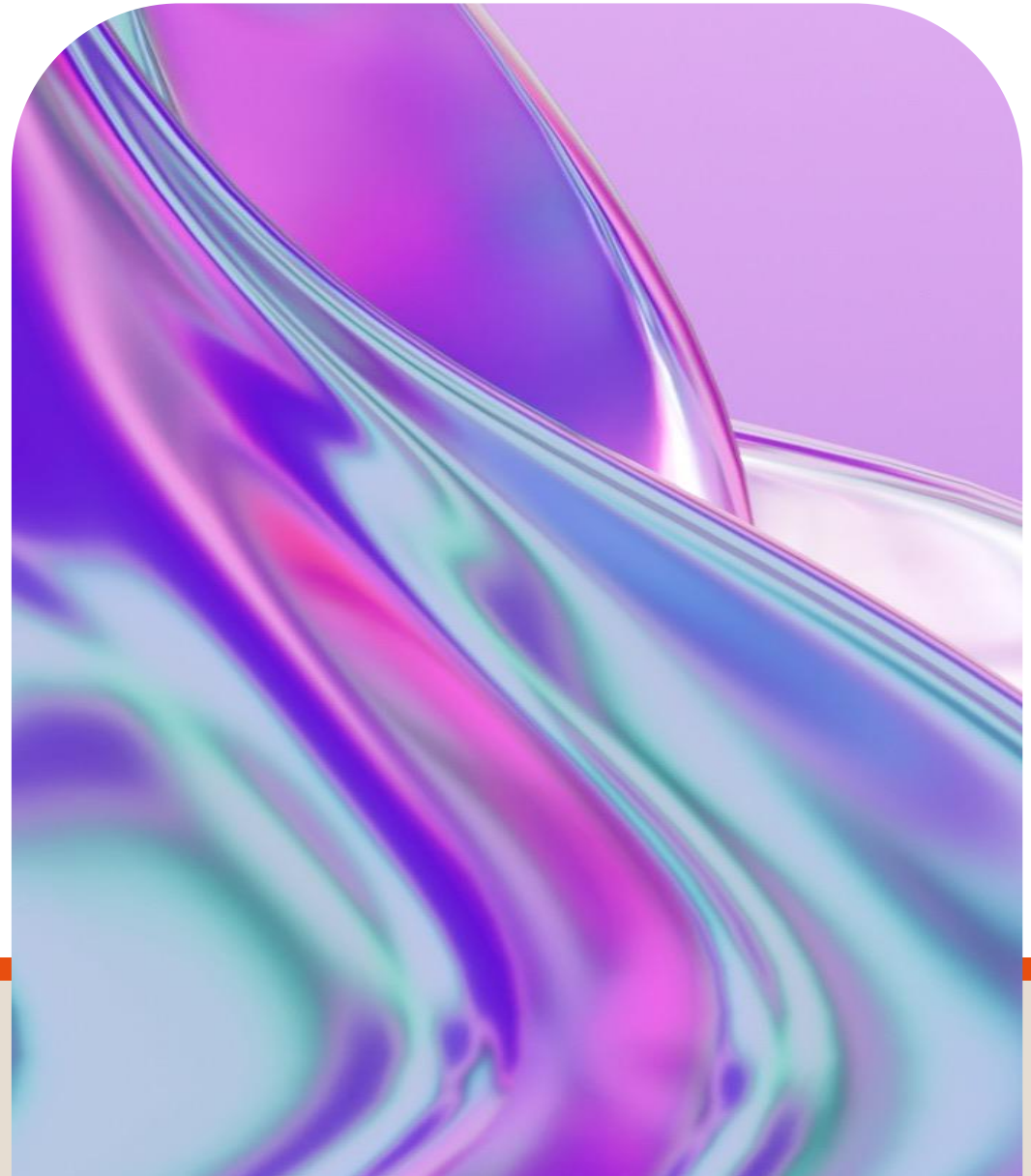
Many different textures can be obtained by tweaking the parameters below:

- **Type of aerosol**
- **Type of propellant and amount**
- **Bulk composition**
- Valve
- Actuator
- Pressure

Senses that are impacted by different textures: sight, touch, smell, hearing and even taste (all).



SENSORIAL: TOUCH Wet/Dry



The wet / dry sensation can be finetuned by tweaking:

- **Type of propellant and amount**
  (e.g. LPG ↑ dryness in comparison with HFC152a)
- **Bulk composition**
  (e.g. many raw can ↑ dryness)
- Type of aerosol
  (e.g. standard aerosol ↑ dryness)
- Valve
  (higher flow, ↓ dryness)
- Actuator
  (e.g. higher amount delivered, ↓ dryness;
  ↑ fineness of the product spray, ↑ dryness)

This is very important for the buying decision of some products: hairstyling, dry shampoos, APDs, Deos, etc

SENSORIAL: TOUCH Cold/Warm

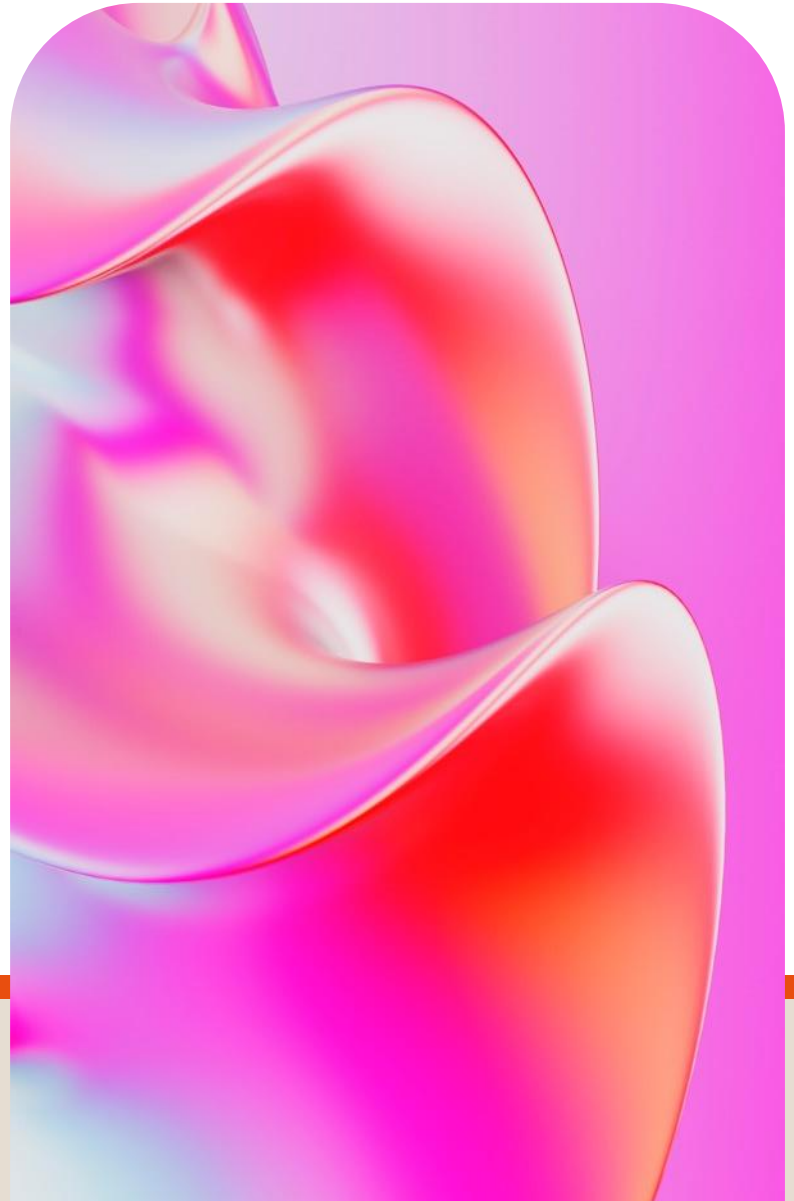
The cold / warm sensation can be finetuned by tweaking:

- **Type of propellant and amount**
  (e.g. LPG ↑ cold than compressed gases)

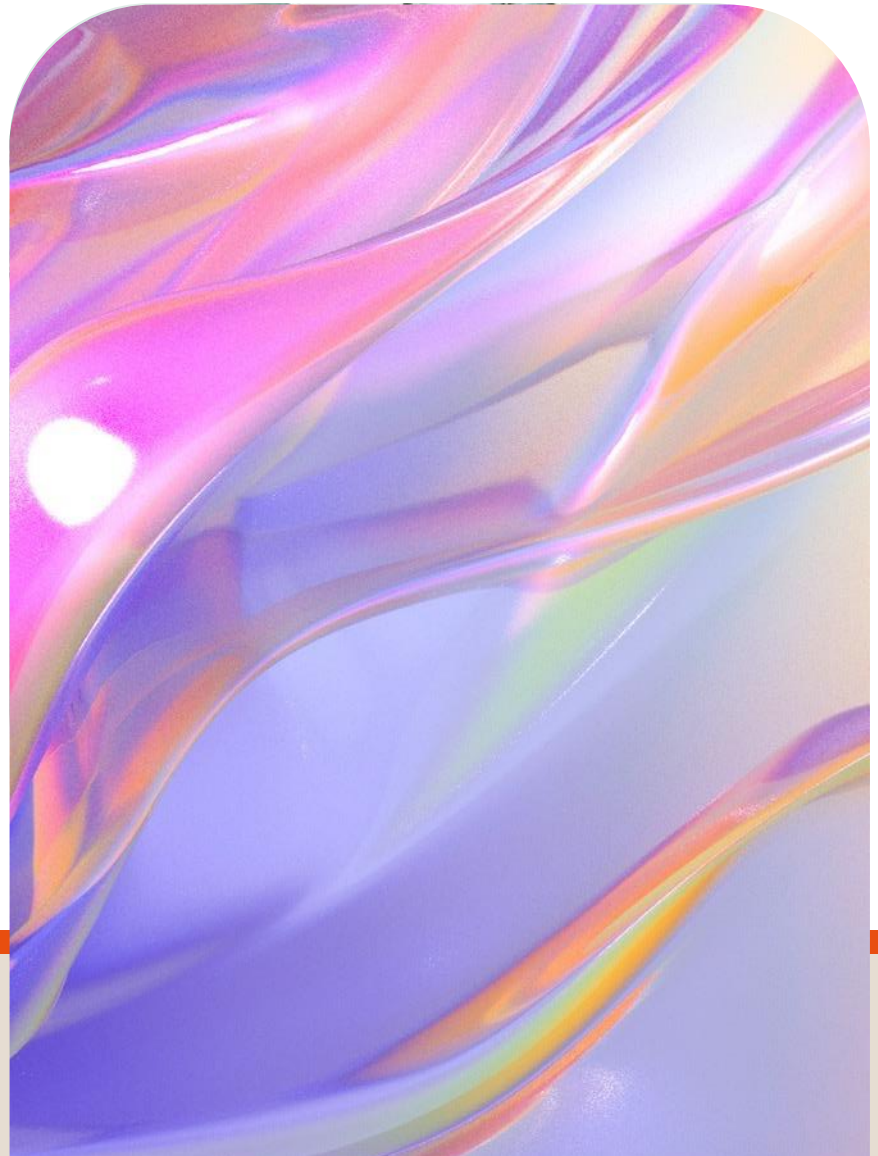
- **Bulk composition**
  (e.g there are specific raw materials to give cold and warm sensations)

- Type of aerosol
  (e.g. naturally propelled aerosol, ↓ cold)

In aerosols you may even have cold and warm sensation in the same product when applied!



SENSORIAL: OTHER TACTILE PROPERTIES
(e.g. tactile feel, spreadability, stickiness, effervescent, etc)



The other tactile properties can be finetuned by tweaking:

- **Bulk composition/properties**
  (major impact)
- Type of aerosol
  (e.g. naturally propelled aerosols are more gentle than standard aerosols)
- Type of texture
  (transformative textures)
- Type of gas and pressure
- Valve
  (higher flow, ↓ dryness)
- Actuator

SENSORIAL: HEAR (sonic properties of the product / sound)

The sound can be more or less pleasant to the customer but it can also influence the perception of efficacy of the product by the consumer.

The sound can be finetuned by tweaking :

- **Type of aerosol**
  (e.g. nitrogen propelled being more silent than standard aerosol)
- **Bulk composition/properties**
- Type of texture
  (specific textures and characteristic sounds: crackling technology, etc)
- Valve
  (higher flow, ↓ dryness)
- Propellant
- Actuator

STANDARD LPG PROPELLED

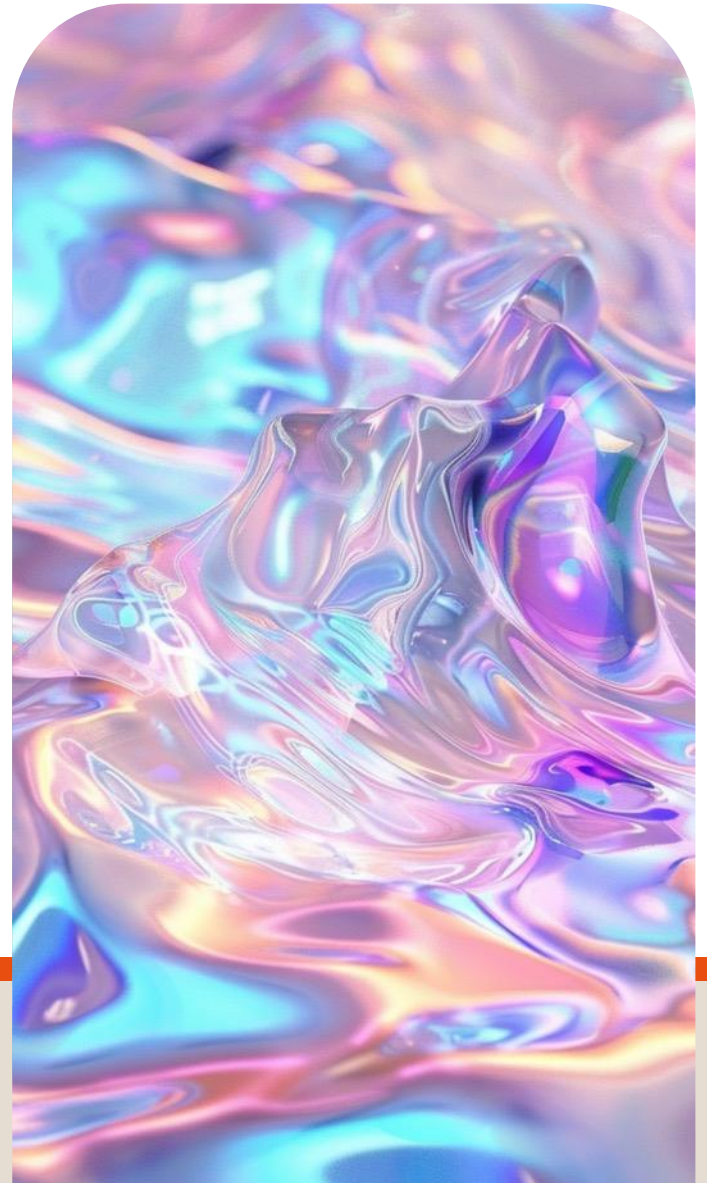
NITROGEN PROPELLED

SENSORIAL: SCENT (intensity, lastiness, etc)

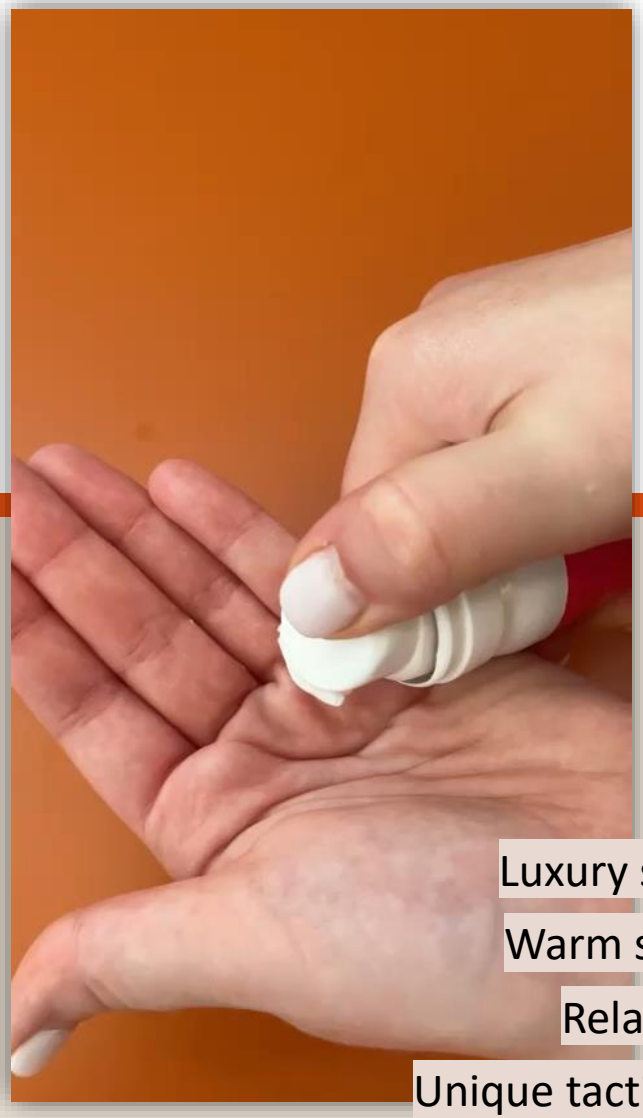
With aerosols we can vary significantly the initial intensity of the scent and the lastiness of the effect.

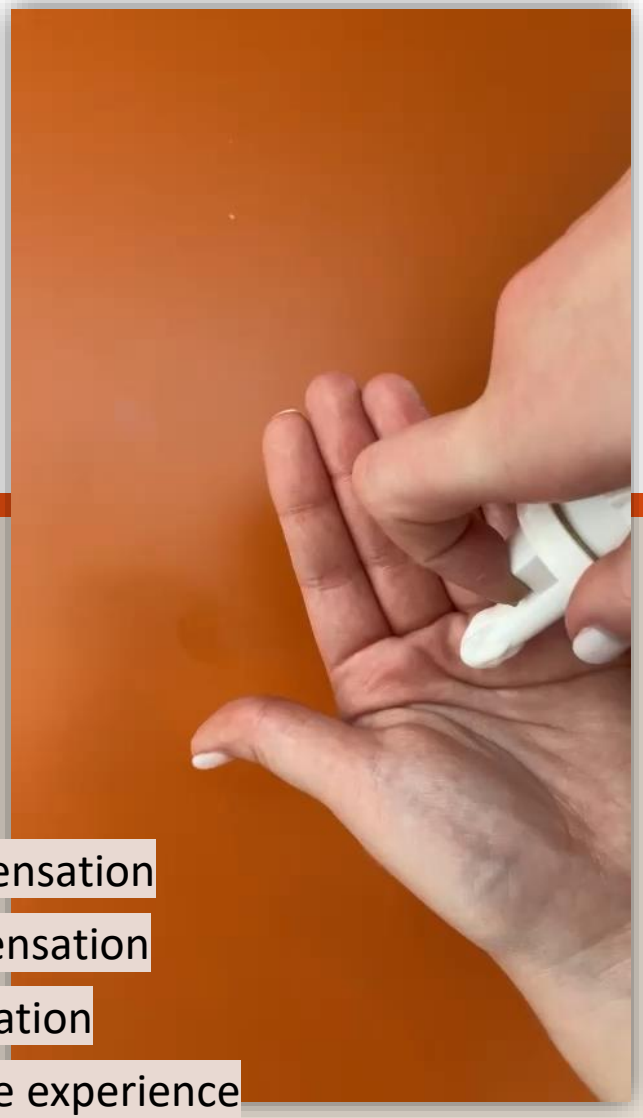
Scent an be finetuned by tweaking:

- **Bulk composition**
  (fragrance selected and amount, smell of the other raw materials)
- **Type of propellant and pressure**
  (each propellant has a characteristic smell, some more strong than others)
- Type of texture
  (the formulation technology used has a big impact on the lastiness of the scent)



TEXTURES: FOAMS





Luxury sensation

Warm sensation

Relaxation

Unique tactile experience

Rose format

www.huffingtonpost.co.uk/entry/evita-beauty-whip-soap-kanebo_uk_57bbfa64e4b0f78b2b4b27ea

TEXTURES: FOAMS

BOUNCY FOAM

Very stable

Very dry

Cushion

Playful

CRACKLING FOAM

Unique sound and tactile experience

Very cold sensation followed by a warm sensation

Tickling sensation

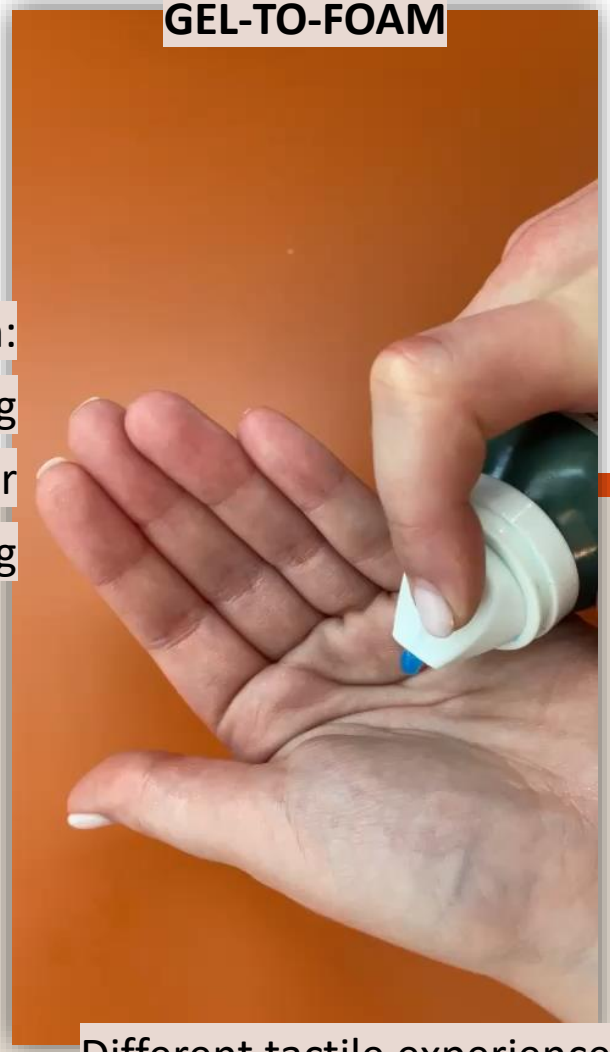
Very specific sound signature

Promotion of actives skin permeation

Relaxation

TRANSFORMATIVE TEXTURES

GEL-TO-FOAM



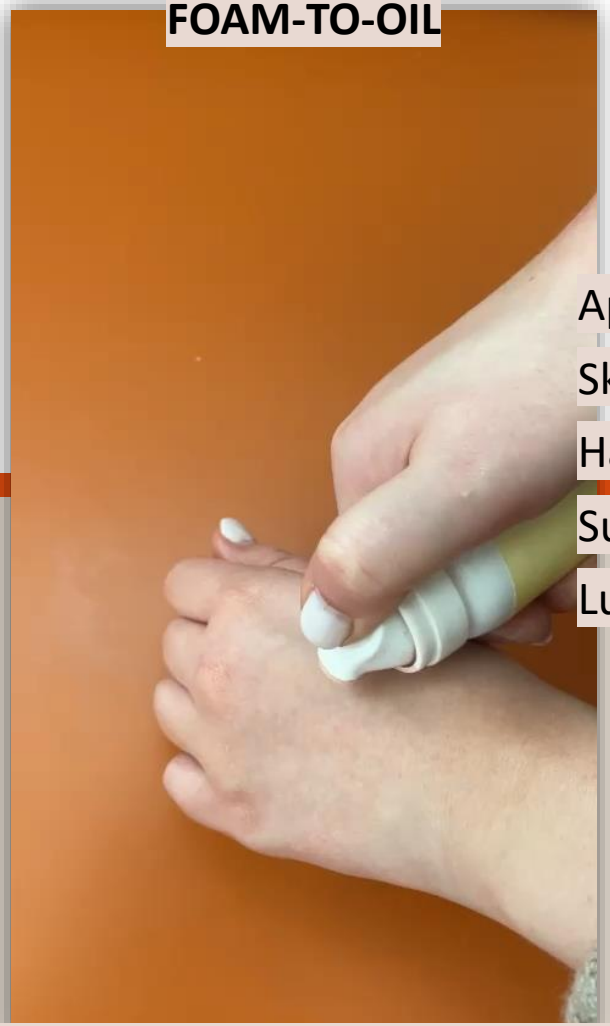
Application:

Grooming

Shower

Hairstyling

FOAM-TO-OIL



Application:

Skin cleanser or moisturizer

Haircare

Suncare

Luxury products

Different tactile experiences while applying the same product

More pleasant application and easier to spread

IS SUSTAINABILITY A THREAT OR AN OPPORTUNITY FOR AEROSOL PRODUCT INNOVATION?

colep consumer products

OPPORTUNITY

TO CONCLUDE…..

What we need to drive future product innovation in the aerosol world?

We must address and overcome current limitations, such solid bulk inside standard aerosols, powders in nitrogen and other features that are traditionally considered “impossible”.

What is the role that we can play in the beauty world?

Aerosols can give a key contribute to the beauty world by elevating and enriching consumer experience due to their diverse multisensory attributes.

Also because of this, aerosols are very well positioned to:

- tap into emerging trends, like neurocosmetics, by providing sensory stimuli that can influence mood and well-being;
- address the growing focus on consumer neuroscience and neuromarketing to create products that resonate with consumers on a deeper level.

What should we do regarding demand in terms of sustainability of the products?

Continue to improve the sustainability of the complete aerosol product: packaging, propellant (e.g. nitrogen) and formula.

Thank you!