

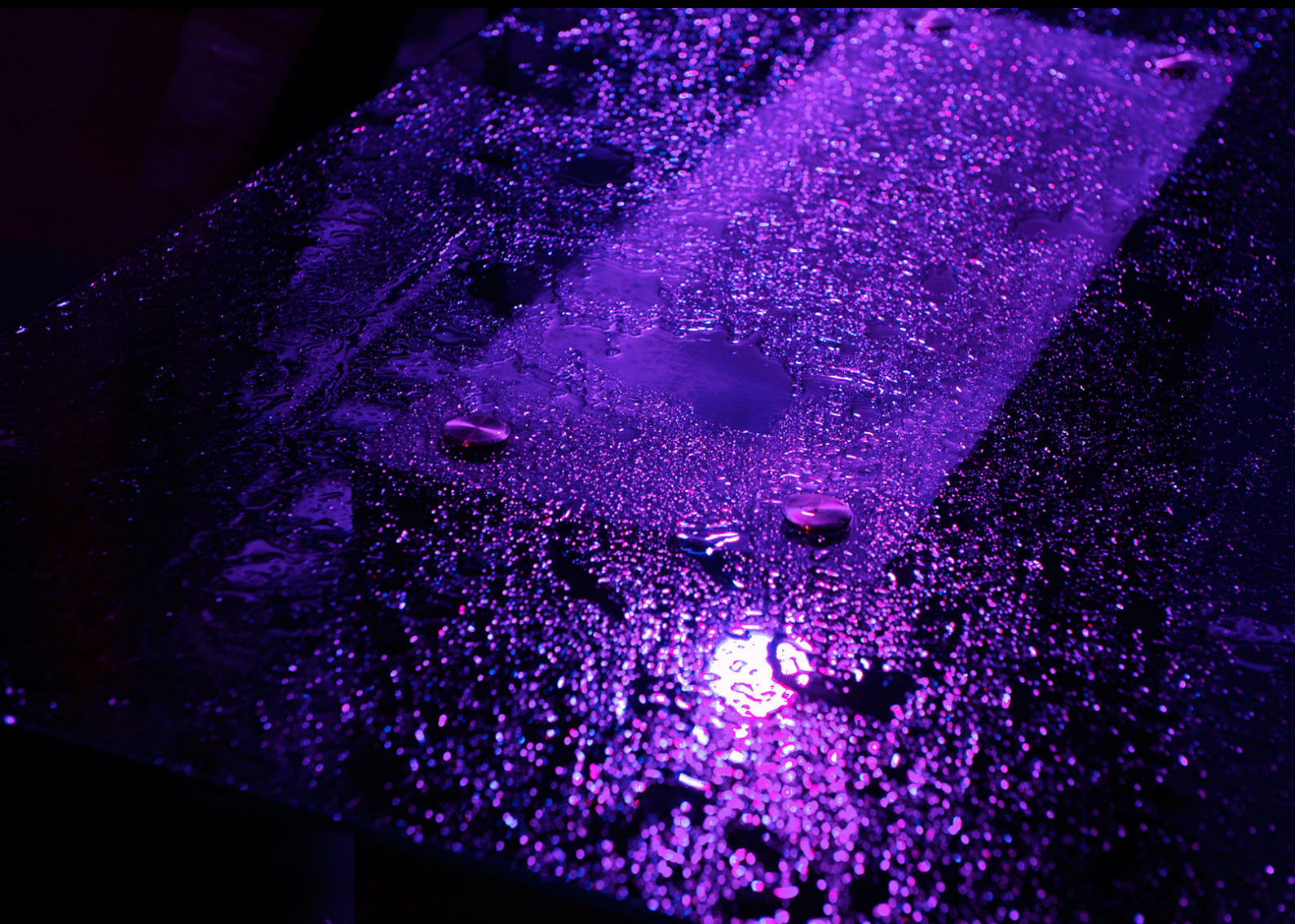
# Soliance - Questice Liquid & Questice Plus

Immediate and long lasting body responsive cooler



Givaudan

engage your senses



# Questice Liquid and Questice Plus Immediate and long lasting body responsive cooler

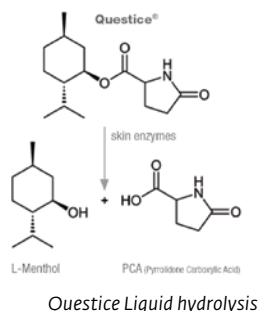


Questice Liquid is an all-day body responsive coolant & freshener. As you heat up, it works naturally, with your body to keep you cool. It is hydrolysed over several hours by skin esterase enzymes to release menthol and create a non-aggressive cooling sensation. Pyrrolidone carboxylic acid (PCA), a Natural Moisturizing Factor is also released and contributes to condition the skin.

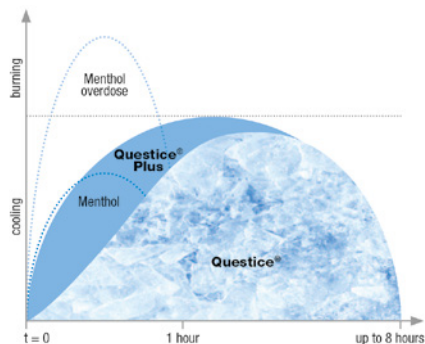
Questice Plus is an amazing, long lasting cooling agent for leave-on applications. It delivers menthol for a good initial 'cooling burst', but also combines the added long lasting advantage of Questice Liquid.

## Body responsive coolant

Questice Liquid is an ester of L-menthol and L-pyrrolidone carboxylic acid (PCA). It is a stable molecule, until it comes into contact with skin 'esterase'. These enzymes break the bond of Questice Liquid, gradually releasing cooling menthol and skin moisturizing PCA.



Questice Liquid has a further advantage, as it can also be considered a 'body responsive' coolant.



Theoretical action of Menthol, Questice Liquid and Questice Plus.

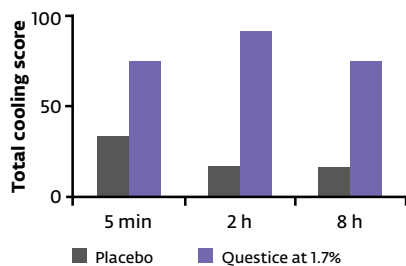
Indeed, when the skin becomes warmer and perspiration is produced, the enzyme and moisture content increase hydrolyzing more Questice for an improved rate of cooling.

## Questice Liquid - Time release of menthol (In vivo test)

12 screened panelists assessed a deodorant containing 1.7% of Questice Liquid or a placebo.

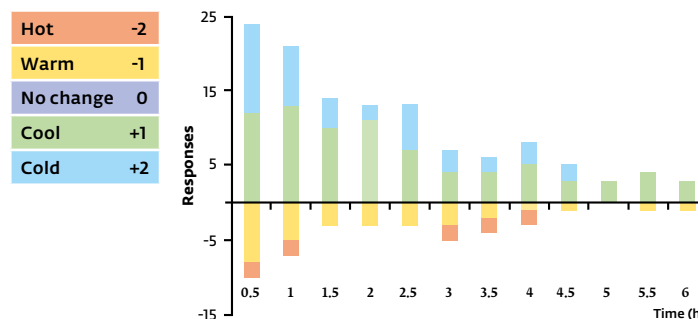
The cooling effect is scored from 0 to 4, all scores have been added.

Questice Liquid provides a long-lasting cooling effect up to 8 hours.



## Questice Liquid - Cooling performance (In vivo test)

40 volunteers evaluated Questice Liquid effect at 1% in an ethanol solution over 6 hours, following a single application, using the scale below:



Questice Liquid provides a long lasting cooling effect over 6 hours.

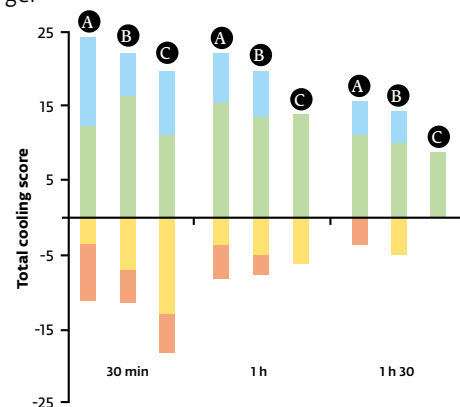
## Questice Plus - Cooling performance (In vivo test)

20 volunteers assessed any sensation they felt every 30 min for 1.5 hours:

- A 1.2% Questice Plus (equivalent to 0.2% menthol + 1.0% Questice Liquid) gel
- B 1.0% w/w Questice Liquid gel
- C 0.2% w/w menthol gel

These perceptions were rated according to the same scale as the previous test.

There is a synergistic effect of Questice Plus with an increase of initial 'cooling burst'.



INCI name: **Questice Liquid:** Menthyl PCA. | **Questice Plus:** Menthyl PCA (and) Menthol (and) DPG.

Preservative: None.

Dosage: 0.5% to 2% | Form: liquid | Water / alcohol soluble

Cosmetic applications: Deodorants, body sprays, foot powders, talc, moisturizers, foundations, gel for tired legs, aftershave balms, invigorating shower gels, shampoos, sunscreens, after sun products, anti-dandruff shampoo, anti-cellulite creams, cooling lip balms....

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