



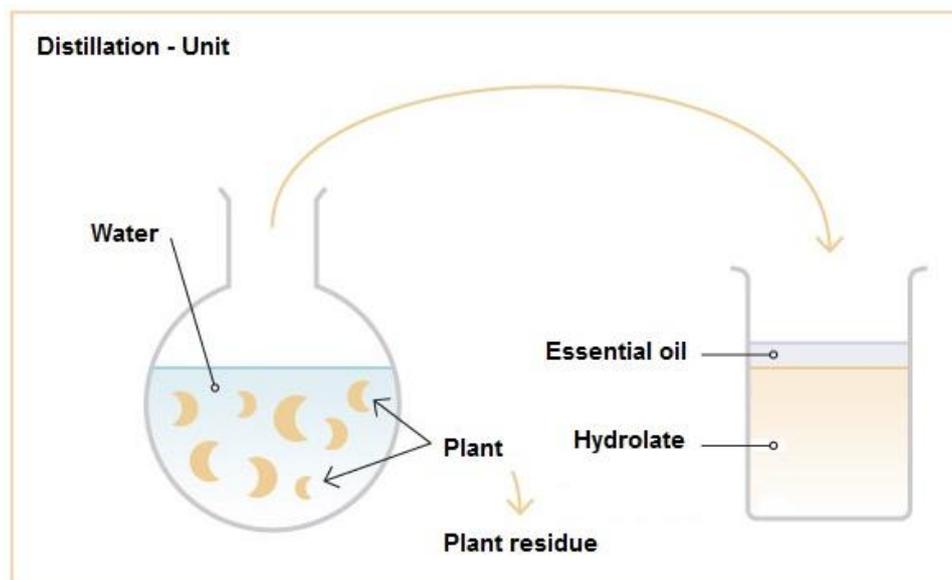
## Hydrolates (floral waters) in natural and organic cosmetics

Hydrolates are produced through a special distillation method, called steam distillation, which has been used for centuries to produce essential oils for the perfume industry. Hydrolates contain the water soluble plant ingredients and are used for their multiple properties in many different cosmetic personal care products.

To which extent a hydrolate can be counted as “natural” or “organic” in Natural and Organic Cosmetics needs to be defined in a transparent manner to prevent falsification and exaggeration of its natural and organic content.

NATRUE aims to establish clear and trustworthy calculation methods which should be comprehensible for the industry, and at the same time honest and transparent to match consumer expectations of authenticity.

### 1. Output of distillation processes



Hydrolates are also known as floral waters and are produced by the distillation of parts of plants - mainly blossoms<sup>1</sup>. During the distillation process, the plant material is mixed with water and heated or directly exposed to steam. Essential oils in the plants and other volatile substances rise up with the steam. The steam is captured in the distillation apparatus and cooled down. The cooled condensate contains extracted water and essential oil, with the latter floating to the top, where it can be skimmed off<sup>2</sup>. The extracted water underneath the oil is known as hydrolate or as floral water should no oil have been produced.

The hydrolate does contain water soluble materials which have been extracted from the plant, including (parts of) the plant juice itself<sup>3</sup>. However, the plant material makes up a small portion of the hydrolate / floral water. A big part of the floral water comes from the water introduced for distillation.

Collected after the distillation, the plant residue is used for many purposes:

- direct use as compost (in organic quality if plant organically grown)
- further extraction to produce specific natural extracts, used in cosmetic products as well as in food or technical products.
- dried, in order to produce, for example, combustible material



## NATRUE Organization - Statement

This plant residue is often not considered by other NOC criteria setting organisations. It remains essential that it is not forgotten as output of the distillation.

### 2. The NATRUE point of view

Genuine natural and organic cosmetics must contain a minimum level of natural ingredients and ingredients produced out of organic starting materials. The natural and organic portion must not be exaggerated.

Significant over-calculation is possible if hydrolates (floral waters) are included in the calculation of the natural or organic content without taking the dilution effect in account.

Out of principle NATRUE does not count water as a natural ingredient in order to prevent the percentage of natural ingredients simply being topped up by adding more water (or "diluted").

The same applies to hydrolates (floral water) which largely consist of water added during the distillation process. In order to reflect the product's true content in natural materials, only the vegetable contribution to the floral water should be included in the calculation, following the same principles as for other plant extracts<sup>4</sup>.

NATRUE's consideration of the natural and organic content within hydrolates (floral waters) follows simple but stringent rules which totally correspond to consumer expectations.

### References

<sup>1</sup> „Die ätherischen Öle“ GILDEMEISTER, E., HOFFMANN, FR. (1956); Akademie-Verlag Berlin, 4. Auflage; Band I, Kap. VII b), p.477ff;

<sup>2</sup> „Die ätherischen Öle“ GILDEMEISTER, E., HOFFMANN, FR. (1956); Akademie-Verlag Berlin, 4. Auflage; Band I, Kap. VI 2), p.335ff

<sup>3</sup> "Aromatherapie" WABNER, D, BEIER, C (2009); Elsevier, Urban& Fischer Verlag, München; p. 20

<sup>4</sup> "NATRUE-Label Criteria" Version 2.3 (2011), p.6

### About NATRUE

NATRUE is the International Natural and Organic Cosmetics Association and promotes authentic natural and organic cosmetics since October 2007. The NATRUE label sets a high standard of quality and integrity so people worldwide may enjoy natural cosmetics truly worthy of that name. More than 2000 products have already been certified. Discover the NATRUE product world at [www.natrue.org](http://www.natrue.org) and come celebrate Natural Cosmetics with NATRUE on [www.facebook.com/NATRUE](https://www.facebook.com/NATRUE).

#### Key points:

- Water cannot be grown and is therefore not organic.
- If hydrolates (floral water) are counted as a natural and organic material in full, this can lead to misinterpretation of the true natural and organic content of a cosmetic product.
- The manner in which the organic content of a hydrolate (floral water) is calculated is key in order not to produce more organic output than input.