ISO 16128 provides guidelines on definitions and criteria for natural and organic cosmetic ingredients and products

The 1 value is assigned to each ingredient according to the following guidance:

3.2.1 Organic index

The *Organic Index* is a the value indicating whether a cosmetic ingredient meets the definition of organic ingredients from Section 2.3 of ISO 16128-1.

The value is assigned to each ingredient according to the following guidance:

Organic Index= 1: Ingredient meets the definition of organic Ingredients. The *Organic Indexes* of constitutive water or reconstitution water used in processing organic ingredients are considered to equal 1.

Plants extracts have an *Organic Index* of 1 if the plant and solvents used are organic. Extracts of dried organic plants and oily macerates of dried organic plants into an organic oil have an *Organic Index* of 1.

4.2 Organic content

The *Organic Content* of a product is the weight percentage, between 0 and 100 percent of all organic ingredients in that product. Il is generally calculated as -the sum of the relative concentrations of a product's ingredients multiplied by their corresponding organic Indexes. This calculation can be performed either by including formulation water, as in *4.3.1* or by excluding formulation water, as in *4.3.2*

4.4 Organic origin content

The *Organic Origin Content* of a product is the weight percentage, between 0 and 100 percent, of all organic ingredients and organic portions of derived organic ingredients in that product. Il is generally calculated as the sum of the relative concentrations of a product's ingredients multiplied by their corresponding organic origin Indexes. This calculation can be performed either by including formulation water, as in *4.4.1* or by excluding formulation water, as in *4.4.2*

4.2.1 Calculation of organic content by including formulation water

$$C° + H20 = Py * Ioy$$

C°H2o is the *Organic Content* of a product, as calculated by <u>including</u> formulation water as an ingredient;
Py, is the percentage, by weight, of each ingredient, y, in the product and <u>includes</u> formulation water as an ingredient; and
Ioy is the organic index corresponding to each ingredient, y, in the product.

Organlc extract	extract of dry organlc plant by 50% organlc	%	Natural index	Natural content	Natural origin index	Natural origin content	Organic index	**Organic content**	Organic origin index	Organic origin content
Formulation water		**60**	1	60	1	60	0	0	0	0
Natural	Vegetable oil	**10**	1	10	1	10	0	0	0	0
Extraet	extract of fresh natural plant by a mlx 30% natural derived glycerin 70% water	**2**	0,7	1,4	1	2	0	0	0	0
Minerai	Salt	**3**	1	3	1	3	0	0	0	0
Derlved natural	Ester with 70% natural origin	**5**	0	0	0,7	3,5	0	0	0	0
Derived minerai	Titanium dioxide	**5**	0	0	1	5	0	0	0	0

Organic	Organic vegetable oil	**5**	1	5	1	5	1	5	1	5
Organic extract	extract of dry organic plant by 50% organic Ethanol / 50% water	4	1	4	1	4	1	**4**	1	4

General considerations for calculation of extract Indexes

1. These Guidelines ISO 16128, their principles and calculations, should be understandable by all the stakeholders;
2. Transparency and accuracy are vital.
3. The organic and natural indexes are a reflection of the starting materials and considers the composition of the final extract;
4. These Guidelines allows the use of fresh and dry plants;
5. These considerations apply for the extraction procedure. If subsequent operations are performed (e.g. dilution), the rules that apply to convert the natural or organic index are the same as other ingredients.
6. Reconstitution of dry plants with water to their original fresh weight **is** allowed. In order to take it into account, water should be present in the finished extract;
7. Water used for the reconstitution, should be considered organic while the water in excess will remain classified natural;
8. An extract made from non-organic plants has an organic index of O
10. The final extract cannot display more organic matter than the actual organic starting materials;
11. Organic extracts containing non-organic solvents **even if they are of organic** origin cannot **have an organic index of 1**