



When we certify raw material, components or constituents, we perform several measurements to improve the accuracy of the biobased carbon content and TC/TOC, as these will be used to determine the biobased content of the finished products.

For example, a resin X will have a biobased content of 75%.

If this resin is used to make a bottle with other petro-sourced components / constituents (cap, additives, labels, ...), the finished product will have a lower biobased content, for example 70%.

This accurate value can be communicated and the finished product can display both the value and the corresponding number of stars (70% is equivalent to 3 stars according to our certification scheme).

During market surveillance, this value must be reached for any product found and analysed.

On the other hand, the manufacturer may want to be satisfied with a class approach. That is, to communicate a number of stars without specifying the actual % of biobased carbon in the product.

In the case of our bottle, this is conceivable when the biobased/petro-based ratio of the different constituents/components can vary over time, within a well-known pre-defined limit. For example, the same petro-sourced cap for different volumes of biobased bottles.

In this case, the number of stars can be communicated by specifying the minimum % of biobased carbon of that class (in our case, 3 stars correspond to 60% minimum).

During market surveillance, this minimum value will have to be reached for any product analysed.

The number of C14 and TC/TOC measurements (and therefore the cost of testing) to communicate the biobased carbon content of finished products will therefore depend on the approach chosen by the applicant: class or %.