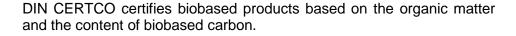


Precisely Right.

### **Certification of biobased products**

# To what refers the biobased content ...in DIN CERTCO certified products







The DIN-Geprüft (= tested) mark is granted based on the content of renewable raw material. The percentage of the biobased content is mentioned in the annex of the certificate and shows the content of used biobased raw material in relation to the contained organic carbon.



Referring to the biobased content to the organic carbon matter is a standardized, acknowledged analysing method. This data may be attested at any time and independent.

When using biobased raw materials with shorter carbon-chains, a slightly lower biobased content may be detected in relation to the used mass.

# Our statement regarding further reference-possibilities

A further method is the reference to the massflow of goods during the production. The content of biobased raw materials is calculated in relation to all raw materials that are used for the production.

Due to the fact that this calculation method is not standardized, a lot of different actions have to be taken to check the result regularly and independently. This may be a comprehensive report showing the incoming and outgoing goods, that shall be verified during an annual factory inspection.

Also a mix of both systems is thinkable, but for us, regarding the above stated reasons, e. g. an annual factory inspection, is not realisable.

Furthermore it is currently also suggested not only to refer to the carbon-isotope relation showing the biobased content, but also to refer to the isotope relation between the elements hydrogen, nitrogen and oxygen. Much to our regret there is no published standard yet, that differs between biobased and not biobased hydrogen, nitrogen and oxygen.

## What the standardization lets us know

Currently the work of the standardization regarding biobased products has not been finished, yet. In case that another reference system will be concluded, DIN CERTCO will adjust the certification scheme within an acceptable time-line.

#### Recult

Taking reference to the carbon matter and only refer to the carbon isotope-relation in the product is a tracable, standardized and economic method to determine the biobased content.