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PRESS RELEASE

Comprehensive poster on biodegradable polymers in various environments in a new version

The world's leading poster on biodegradability has been updated by the nova team of experts: current standards and certifications as well as the latest scientific findings

Hürth, 22 August 2024: The biodegradation of a material is a process that depends on the complex biological conditions at each site. In addition, only a handful of polymers have the inherent ability to biodegrade in different environments. Therefore, specific standards and certificates have been developed in recent years to provide a framework for declaring whether or not a product can biodegrade in an environment. Scientific verification and certification of the communication of environmental claims is becoming increasingly important under the Green Claims Directive. Biodegradability is one environmental claim that will need to be verified by third party certification.

In order to improve the understanding of biodegradation and biodegradability and their certification, a group of experts came together a few years ago to develop a poster showing which polymers biodegrade in which environments according to established standards and certification schemes. This group includes experts from the nova Institute (Germany) together with a number of leading experts from Normec OWS (Belgium), Hydra Marine Science (Italy/Germany), IKT Stuttgart (Germany), Wageningen University & Research (The Netherlands) and in cooperation with DIN CERTCO (Germany) and TÜV AUSTRIA (Austria/Belgium).

The expert group met again this year to discuss the latest scientific evidence in the field of biodegradable polymers in order to make meaningful changes to the poster. The generic classification on the poster is only supported by tests performed in the context of certification. Therefore, the expert group decided to include the biodegradability of polycaprolactone (PCL) in additional environments: soil, freshwater, marine and anaerobic conditions. In addition, a new certification for marine biodegradability has been published by DIN CERTCO in 2023, based on ISO 22403, the standard that provides requirements for marine biodegradability, and is now mentioned on the poster. A new poster design and a more precise definition of biodegradation and biodegradability complete the update for this year.

The poster is freely available at <https://renewable-carbon.eu/publications/product/biodegradable-polymers-in-various-environments-according-to-established-standards-and-certification-schemes/> in PNG format and <https://renewable-carbon.eu/publications/product/biodegradable-polymers-in-various-environments-according-to-established-standards-and-certification-schemes-graphic-current-version/> in PDF format.

The full team of experts will keep abreast of the latest scientific publications and certifications in the field of biodegradable polymers and will continue to keep this poster up to date.

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Responsible for the content under German press law (V. i. S. d. P.):

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nova-Institut GmbH has been working in the field of sustainability since the mid-1990s and focuses today primarily on the topic of renewable carbon cycles (recycling, bioeconomy and CO₂ utilisation/CCU).

As an independent research institute, **nova** supports in particular customers in chemical, plastics and materials industries with the transformation from fossil to renewable carbon from biomass, direct CO₂ utilisation and recycling.

Both in the accompanying research of international innovation projects and in individual, scientifically based management consulting, a multidisciplinary team of scientists at **nova** deals with the entire range of topics from renewable raw materials, technologies and markets, economics, political framework conditions, life cycle assessments and sustainability to communication, target groups and strategy development.

50 experts from various disciplines are working together on the defossilisation of the industry and for a climate neutral future. More information at: nova-institute.eu – renewable-carbon.eu

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