Ercros

Ercros presents **ErcrosBio LN300**, a nucleating agent biodegradable and sustainable that enhances the crystallinity of the PLA

Food container made with the new ErcrosBio LN300

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Ercros has developed, within the ErcrosBio range, a new biodegradable and sustainable nucleating agent, the **ErcrosBio LN300** grade, which, due to its properties, enhances the crystallinity of polylactic acid (PLA) and offers a clear competitive advantage over classical nucleating agents, given that increases productivity, decreases the costs of materials and energy and simplifies the production process while maintaining the final performance of the plastic material obtained.

The **ErcrosBio LN300** grade is based on PDLA (polyD-lactic acid), which has been thermochemically activated and has a nucleation effectiveness superior to that of other classical agents for this biopolymer.

Furthermore, it allows to mould PLA articles by injection or thermoforming with a high crystallinity of the polymer and improved thermomechanical properties, using a mould temperature by 80°C, lower than that between 90°C and 120°C required by the nucleating agents existing up to now, and of shorter cycle times.

The main advantage of moulding at temperatures below 90°C is using moulds tempered with water at atmospheric pressure, the preferred system for many plastic transformers, instead of thermal oil or pressurized water.

The annealing after demoulding can be an alternative to the crystallization in the mould to achieve an increase in productivity. This annealing is also enhanced by the use of **ErcrosBio LN300**.

Another advantage of this new nucleating agent is that with only 1% of weight on the total mixture is sufficient to achieve a high rate of crystallization of the PLA in the mould, unlike other nucleating agents such as talc or the PDLA itself without activating, that need to be added in greater proportions so that their effect be significant.

ErcrosBio LN300 belongs to the ErcrosBio range, a family of bioplastics that originate in natural and renewable products, are biodegradable and compostable, and have a low carbon footprint.