



Synterra grade IM (left) and traditional PLA (right) after immersion in boiling water.

Non-GMO PLA Wins Blue Tulip Award

By mixing 100% pure PLLA with 100% PDLA, a fast cycle and heat-resistant injection mouldable PLA with very good temperature and impact properties is made that far exceeds the properties of the individual polymers. With a Heat Deflection Temperature [HDT B @ 0,45 N/mm²] of 123°C Synterra® IM material performs much better than conventional PLA and the impact strength is comparable to that of ABS. After injection molding the IM material is able to withstand boiling water. With this development Synbra Technology sets a step in developing a new generation of high performance biopolymers.

The polymerization of the optical isomers PLLA and PDLA takes place at Synbra Technology in Etten-Leur, the Netherlands, in a plant with a capacity of 5000 tonnes/annum, which was commissioned early 2011.

Synbra Technology expects further growth in its PLA business as many brand-owners and retailers in Western Europe prefer to use bio-based and non-GMO PLA that is also heat-resistant.

Shortly after introducing its Synterra IM material, Synbra Technology was awarded at the Accenture Blue Tulip Awards at the RAI Elicium, in Amsterdam, the Netherlands.

"This Blue Tulip Award in the category 'Making more out of less' is the ultimate reward for the entire team that participated in the successful development of our Synterra IM grade, which is made from Cradle to Cradle™ certified PLA," said Peter Matthijssen, Commercial Manager of Synbra Technology.

In recognition of the purity of the raw materials used, the PLA of Synbra was Cradle to Cradle™ certified by EPEA in Hamburg and is thus the first PLA in the world with this certification. Application of this PLA also improves various properties such as toughness and temperature resistance of several other bio-based recipes, in which PLA is an important constituent. **MT**