PLASTIC TYPES

Starch & Starch Blends

Constituting about 80 per cent of the bioplastics market, thermo-plastical starch currently represents the most important and widely used bioplastic. Pure starch possesses the characteristic of being able to absorb humidity and is thus being used for the production of drug capsules in the pharmaceutical sector. Flexibiliser and plasticiser such as sorbitol and glycerine are added so that starch can also be processed thermo-plastically. By varying the amounts of these additives, the characteristic of the material can be tailored to specific needs (also called "thermo-plastical starch").

PLA

Polylactide acid (PLA) is a transparent plastic made from natural resources. It not only resembles conventional petrochemical mass plastics (like PE or PP) in its characteristics, but it can also be processed easily on standard equipment that already exists for the production of conventional plastics. PLA and PLA-Blends generally come in the form of granulates with various properties and are used in the plastic processing industry for the production of foil, moulds, tins, cups, bottles and other packaging.

PHB

The biopolymer poly-3-hydroxybutyrate (PHB) is a polyester produced from renewable raw materials. Its characteristics are similar to those of the petrochemical-produced plastic polypropylene. The production of PHB is currently booming. Companies worldwide are aiming to either begin production of PHB or to expand their current production capacity, which would most likely result in a price reduction to fewer than 5 Euros per kilogram. The South American sugar industry, for example, has decided to expand PHB production to an industrial scale. PHB is distinguished primarily by its physical characteristics. It produces transparent film at a melting point higher than 130 degrees Celsius, and is biodegradable without residue.

Source: www.bioplastics24.com