

What is bioplastic?

At BioPak we opt to use bioplastics in our quest to reduce dependence on fossil-based – non-renewable resources. Currently most commercial grades of bioplastics are made from plant starch. We use a bioplastic called Ingeo™ PLA (Poly-Lactic Acid), made by industry leader NatureWorks LLC in the USA.

Bioplastics look and feel similar to conventional plastics and are suitable for most packaging applications. However, unlike finite oil-based plastics they are produced from annually renewable resources.

Right now Ingeo™ PLA is made from dextrose (sugar) derived from field corn already grown for many industrial and functional end-uses. In North America, corn is the feedstock of choice as it is the most economically feasible source of plant starches. Ingeo™ PLA uses less than 1/20th of 1% (0.05%) of the annual global corn crop today, so there's little to no impact on food prices or supply (1). The process however does not require corn, it only needs a carbohydrate source and could be made from sugar beets, sugarcane, wheat and more. In the future Ingeo™ PLA will be made from cellulosic raw materials, agricultural wastes and non-food plants.

We work with Natureworks LLC because like us they are committed to a process of ongoing improvement. They plan on transitioning the current raw material supply from agricultural crops to residual biomass. This is responsible innovation.

For more information on Ingeo™ PLA visit www.natureworkslc.com

- PLA is made from plants not oil
- Uses dextrose (sugar from field corn as the primary feedstock, but can be made from any abundantly available sugar
- Does not require genetically modified (GM) feedstock
- End of life options include – recycling, incineration and commercial composting
- Emits 75% less greenhouse gas emissions compared to the production of conventional plastic production
- The production of PLA consumes 50% less non renewable energy

