Why bioplastics?

**Safer and more friendly for our planet**
PLA is made from renewable, biobased resources and has a considerably lower carbon footprint than other plastics. It is also biodegradable, leaving behind no harmful substances.

**Positive business impact**
Consumers are becoming increasingly aware of their impact on our planet and are starting to appreciate and seek out more environmentally friendly alternatives. Bioplastics also alleviate our reliance on increasingly expensive oil-based sources.

Why PLA?

**100% biobased**
PLA resins are 100% biobased and are made from renewable resources.

**Highly efficient use of feedstocks**
PLA is a highly efficient plastic. To make 1kg of PLA requires just 1.6 kg of sugar. Other types of bioplastics can require significantly more natural resources to produce the same amount of end-product.

**Available on an industrial scale**
PLA is already commercially available at an industrial scale. Contact us to make your bioplastic applications a reality.

**Proven durable applications**
PLA applications have already been developed and introduced to the consumer market. These applications have proven to be successful, which attests to the competence of this polymer. Whether you are interested in molded parts, film, foam or fiber, just ask us for some sample material and we’ll be happy to assist.

Why Corbion?

**Advanced technology and R&D**
At Corbion, we engage in ongoing R&D efforts to improve performance and sustainability of our products and processes. The breakthrough in high heat PLA performance, production of gypsum-free PLA and the use of alternative feedstocks are key focus areas for us.

**Consistent high quality**
Corbion has mastered the production technology to make high purity, high performance PLA resins at industrial scale.

**100 years of experience**
Corbion has 100 years of experience in sales, application development and industrial scale production. Corbion is the global market leader in lactic acid, lactic acid derivatives and lactides.

**Global presence**
With 11 production facilities and sales offices on every continent, we are always close by to help you with your application development.

Corbion: a leading biochemical powerhouse

Corbion produces high quality lactic acid, lactide and neat PLA resins (Poly Lactic Acid) using biochemical fermentation and polymerization processes. PLA can be converted into foam, film, molded plastic parts and fiber: the application possibilities are endless.
PLA and the circular economy

In the circular economy, so-called ‘waste streams’ and products at their ‘end-of-life’ form the basis for new products, instead of being disposed of. This more comprehensive, sustainable approach replaces the linear economy with a circular, biobased economy where products are produced from sustainable, natural resources and are re-used and recycled as much as possible. At their end-of-life, these products then have a range of options to transform them back into feedstock for new, added value product life cycles.

Multiple end-of-life options:
- Recycle and reuse
- Compost/biodegrade
- Incineration/renewable energy recovery
- Anaerobic digestion
- Feedstock recovery

Low carbon footprint

PLA bioplastics offer a significantly reduced carbon footprint versus traditional oil-based plastics.

This is important for the health of our planet and is a growing concern amongst consumers, who are examining the sustainability aspects of their purchases ever more critically.

As media attention increases and regulatory activity gains momentum, biocontent in plastic will become a more and more relevant issue for producers to address.
Corbion has developed a range of high heat PLA compounds. This opens up a multitude of possibilities for applications that require improved heat resistance, such as coffee cups and lids.

Corbion’s Luminy® portfolio includes a number of PLA products tailored to specific market needs and conversion processes, including:

- High heat PLA
- Standard PLA
- PDLA

PLA bioplastics: applications & markets

**Automotive**
For interiors & under-the-hood parts.
- High heat resistance
- Durable
- Hydrolytic stability

**Consumer electronics**
Injection molded casings & housings.
- High heat resistance
- Excellent surface appearance
- Durable
- Good impact resistance

**Packaging & disposables**
Yoghurt pots, coffee cups & lids, disposable serviceware.
- Transparent
- Compostable
- Biobased
- Recyclable

**Sportswear & goods**
Fibers for apparel, foam for surfboards & helmets, molded parts for equipment.
- High heat resistance
- Good breathability
- Soft & tactile feel
- Washable & durable
Sustainability is embedded in our long term strategy and business practices. It is based on balancing the elements of People, Planet and Profit in all that we do. We are working towards our objectives in the areas of energy, water, waste, packaging and procurement. By engaging with partners and stakeholders, we aim to increase sustainability throughout our value chain.

**Sustainable feedstocks**

Corbion is actively involved in various fundamental research and development programs to develop alternative feedstocks for the production of PLA.

Following an intensive research project, Corbion has succeeded in producing polymer grade lactic acid from second generation feedstocks on demo scale, from which PLA resin has been made. Second generation feedstocks are those which are not suitable for human consumption, and include plant-based materials like bagasse, corn stover, wheat straw and wood chips.

**Sustainable business practices**

Sustainability is embedded in our long term strategy and business practices. It is based on balancing the elements of People, Planet and Profit in all that we do. We are working towards our objectives in the areas of energy, water, waste, packaging and procurement. By engaging with partners and stakeholders, we aim to increase sustainability throughout our value chain.

**Sustainable agriculture**

As part of our initiative to improve the sustainable sourcing of our key raw materials, Corbion is a member of Bonsucro and SEDEX. Bonsucro is a global, multi-stakeholder, nonprofit initiative dedicated to reducing the environmental and social impacts of sugarcane production. At Corbion, we use European sugar beet and Thai sugarcane as feedstock for the production of PLA bioplastics. These are always GMO-free crops.
Corbion in bioplastics

For the plastics industry, Corbion offers PLA resins for general purpose and high performance bioplastics. PLA (Poly Lactic Acid) is a biobased plastic derived from renewable resources with a low carbon footprint and is used in packaging, disposables, fibers, electronics and automotive markets. Additionally, Corbion is developing 100% biobased FDCA for high performance PEF (Polyethylene Furanate) resin. PEF can, for example, be used for bottle and film applications due to its excellent barrier properties.

About Corbion

Corbion is the global market leader in lactic acid, lactic acid derivatives and lactides, and a leading company in emulsifiers, functional enzyme blends, minerals and vitamins. The company delivers high performance biobased products made from renewable resources and applied in global markets such as bakery, meat, pharmaceuticals and medical devices, home and personal care, packaging, automotive, coatings and coating resins. Corbion operates 11 production plants, in the USA, the Netherlands, Spain, Brazil and Thailand, and markets its products through a worldwide network of sales offices and distributors. In 2015, Corbion generated annual sales of € 918.3 million and had a workforce of 1,673 employees. Corbion is listed on NYSE Euronext Amsterdam.