



Capventure

Capventure bv, Van Leijenberghlaan 199-E, 1082 GG Amsterdam, Netherlands
tel. +31 20 644 65 53, info@capventure.com, www.capventure.com

VAT (BTW) NL8143.98.443.B01, Chamber of Commerce no. 34175003
bank Netherlands: IBAN NL77 ABNA 0465 7820 19, BIC/SWIFT ABNANL2A

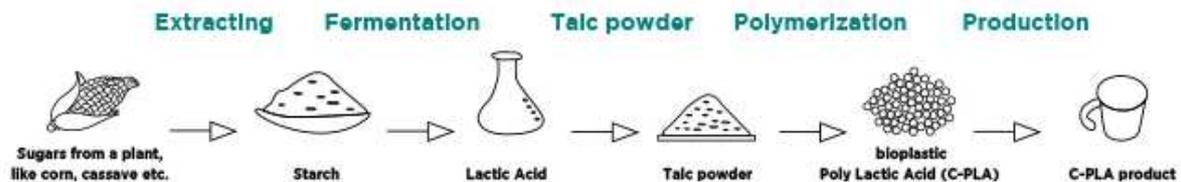
Q&A: bioplastic C-PLA

What exactly is bioplastic C-PLA?

The collection is made from renewable resources. The material we use for that is C-PLA, a bioplastic.

How do we make biobased plastic instead of a fossil-based plastic like Polypropylene?

- 1- Instead of fossil resources we use plants which contains a lot of a natural sugar, like corn, beetroot, or cassava. We extract the sugar from the plant which results in a starch.
- 2- Next step is fermenting this starch into a lactic acid; a milk acid.
- 3- By adding Talc powder to the lactic acid it starts to crystallize.
- 4- Lactic acid will be polymerized which makes it a Poly Milk Acid. The Talc powder creates a PLA that is more resistant to heat, namely C-PLA (Crystallized Poly Lactic Acid). A new plastic material is made. The appearance is a grain, so called granulate.
- 5- With this C-PLA granulate we start producing products by – for example – injection moulding. The result is a product with the specifications of an ordinary plastic, but made of renewable resources.



What is the exact composition of bioplastic C-PLA?

Component list bioplastic C-PLA:

- 70-80% PLA: CAS number 9051-89-2
- 20-30% Talcum powder: CAS number 14807-96-6
- <1% Colorant

What exactly is talcum powder?

The talcum powder, also called magnesium silicate, is a natural rock / mineral that is mined. The talcum powder is added to make the product more heat resistant.

Talcum powder is sometimes associated with asbestos, what about that?

During the extraction of talc, asbestos may occasionally come along. This is because rocks containing asbestos sporadically occurs naturally in talc mines. Continuous research is done to ensure that there is no asbestos in the talc that we use for the bioplastic C-PLA products. We have had this tested by a renowned lab and have a certificate for this. Quality and safety are very important to us; our products comply with European legislation.

Is bioplastic C-PLA biodegradable?

The granulate is biodegradable, we have a certificate available for this.

At this moment we cannot claim this for the end-products, as the supporting certificates are currently lacking.

Are the bioplastic C-PLA products BPA and melamine free?

Yes, the bioplastic C-PLA products are free of BPA and also free of melamine and formaldehyde.



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Does bioplastic C-PLA have an added value for the environment?

Yes, Bioplastic C-PLA is made from renewable resources, such as corn, cassava, sugar cane or grain. Unlike most other plastics, no Petroleum is being used to produce bioplastic C-PLA. Petroleum is a limited fossil resource, the extraction and processing of petroleum causes damage to the environment. In addition, the CO₂ emission from the production of bioplastic C-PLA is much lower than for example melamine or PET. For more information check: <https://www.european-bioplastics.org/bioplastics/>

Do bioplastic C-PLA products compete with global food production?

Yes, but we use the crop which is the most available on the market at the time of production.

For more information check: <https://www.european-bioplastics.org/bioplastics/Feedstock/>

Where do the components of the bioplastic C-PLA products come from?

The main ingredient is PLA which is made from the sugars of corn, cassava, sugar cane or grain. The talcum powder is a natural rock / mineral that is mined. The used colorants are regular artificial food-safe colorants.

What kind of colorants are used for the bioplastic C-PLA collection?

Zuperzozial uses regular artificial food-safe colorants. We have an "EU Food Safe Certificate" (Europe).

What about the colour fastness of the material?

In the used colorants there is no UV blocker. This means that the bioplastic C-PLA products could fade in colour during use. We therefore advise not to use the products in bright sunlight (such as on the terrace or in the shop window) for a long time.

Do the bioplastic C-PLA products have a coating?

Bioplastic C-PLA products do not require a coating.

Is bioplastic C-PLA food safe?

Our products have been extensively tested by an independent European institute and we have an "EU Food Safe Certificate" (Europe)

Is bioplastic C-PLA compostable?

Organic waste processing is set up in such a way that organic waste is only allowed to compost for a few weeks. Regulations for compostability can differ per country. As there are no uniform guidelines, Bioplastic C-PLA is not compostable.

For more information check: <https://www.european-bioplastics.org/bioplastics/waste-management/>

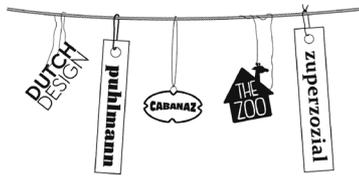
Is bioplastic C-PLA recyclable?

The waste processing facility has not yet been set up to process Bioplastic C-PLA separately. As long as this is not arranged, the C-PLA products cannot be recycled (and falls under residual waste).

For more information check: <https://www.european-bioplastics.org/bioplastics/waste-management/>

Is bioplastic C-PLA unbreakable?

The bioplastic C-PLA products are not unbreakable. The material will not shatter as much as glass or ceramic, but if dropped with a certain force, height and surface, it may crack or break.



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Does bioplastic C-PLA accept colourants (such as curry, tomato soup, coffee)?

With normal use there is nothing wrong. Nevertheless, we recommend that you wash the product in the dishwasher immediately after use.

Is bioplastic C-PLA scratch resistant?

Signs of use may appear with intensive use, especially when using sharp knives. Do not use the material as a cutting board.

Are bioplastic C-PLA products suitable for hot liquids?

Yes, the products are suitable for hot liquids and are certified for this. The material is not suitable for cooking or baking or for long-term exposure to a boiling liquid.

Can the bioplastic C-PLA products be put in the dishwasher?

Yes, the products are suitable for cleaning in the dishwasher.

Can the bioplastic C-PLA products be used in the microwave?

Yes, the products are suitable for short-term heating in the microwave (<1 min / 600 watts / <90 ° degrees).
For products with a print, a lower temperature applies (<1 min / 450 watts / <70 ° degrees).
It is not suitable for cooking, but heating up food / drink is no problem.

Can the bioplastic C-PLA products go into the oven?

No, the bioplastic C-PLA products cannot be put in the oven, steam oven or grill.

What is the lifespan of bioplastic C-PLA products?

In domestic use, the product will last for years.