PANARA s.r.o

PROFILE

Since 2006 the company started with R&D in bioplastics area with the goal to develop biodegradable- bio based blends for different types of plastic processing. Strong partnership with Slovak university of technology escalated into common excellent and unique centre called CEPOMA (Center for Applied Research of environmentally friendly polymeric materials) which is technological and technical base for research and development activities connected with new biodegradable and bio-based blends. The main goal is to introduce to the worldwide market a new generation of sustainable bioplastic material based on PHA and PLA polymers that could be utilized for production of final plastics products (such as films for agriculture use, packaging material, 3D prints etc.). The goal is achievable through the application of a newly developed 100% bio-based and biodegradable multi-component material developed by Polymer Institute of the Slovak Academy of Sciences and Slovak University of Technology with collaboration of PANARA Company - NONOILEN, which has obtained exclusive licence for blend production for European area, Russia, Singapore, China. Nowadays technical solution is patented also in region of Japan and Korea.

FOUNDATION

- Since 2006 with R&D

SIZE

- small-sized

KEY PRODUCTS/ SERVICES

- producing biodegradable plastics
- NONOILEN 1st generation
- NONOILEN 2nd generation
- Services for plastic items Producer
- R&D

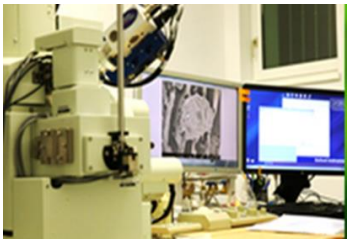
KEY MATERIALS

- PLA
- PHB
- Starch
- Additives

SUSTAINABILITY, USING OF BIOMATERIALS

Nonoilen material belongs to Bioplastics advanced materials. The uniqueness of newly developed multicomponent biodegradable material dwells in its origin as it comes from 100% renewable (biobased) raw materials and at the same time in its optimal properties for plastics production utilization.

NONOILEN® today is a unique solution in plastics, meeting the strictest ecological criteria, while products have excellent utility quality. It is made from polymers coming from 100% of natural renewable raw materials, is capable to biodegradate in industrial compost, in electric compost bin, in domestic compost and in soil, without the formation of microplastics. The appropriate composition can regulate the properties of the finished products in a wide range for various applications.



Krškanská 21Adresa 2
949 05, Nitra
Phone: +421 37 64 23 980
Mob.: +421 914 322 382
e-mail: info@panaraplast.com
GPS: N 48.286326, E 18.093453

PRODUCTION SPECIALITIES

Nonoilen represents a new generation of progressive biodegradable materials based on polymers from renewable sources. It is the only bioplastic in the market, which does not contain synthetic polymers made of crude oil and is sufficiently tenacious, 100% biodegradable. The characteristics are alike conventional plastics, such as PE, PP, polyesters and the like, and long-term stable during storage and use. It is situated only in a biologically active environment and degradation products do not cause a greenhouse effect. This is a new generation of progressive biodegradable materials based on renewable sources. The raw material base is formed by polymers of polylactic acid (PLA), polyhydroxybutyrate (PHB) and other ingredients. This unique solution called NONOILEN I. Generation, is protected by a patent of WO2012141660 A1 in many countries of the world. In order to improve biodegradation, II. Generation was developed. Thanks to the addition of thermoplastic starch (TPS) and special production technology, is capable of biodegradation, not only in conditions of industrial and domestic compost, but also in soil (total decomposition time is adjustable, in industrial compost is up to 120 days).

SUMMARY AND SOLUTIONS

The aim of PANARA and STU (centre CEPOMA) is to replace as much as possible the maximum amount of single used plastic packaging by biodegradable NONOILEN-based materials with also the benefits of reuse. From the point of view of waste minimisation, we want to introduce material recycling, which is not capable of most other bioplastics. We will comprehensively address the lifecycle of products so that the waste generated is assessed as way environmentally friendly. We gradually want to expand the application areas NONOILEN for technical applications, automotive industry, medicine, gastronomy, 3D printing and more. Another objective are innovations in packaging to make proposals for products based on paper and biodegradable plastics films particularly for food packaging able of composting. We are developing the business sector cooperation with the academic sector. The development continues to move forward, the whole team has the ambition to deliver not only the production of organic plastics, but to offer with them a whole system that can ensure that waste from these plastics is truly evaluated in the most correct way by biodegradation.