

Acelon Chemicals & Fiber Corp.

Eco Friendly, Diversified, and functional Innovation

Established in 1988, Acelon has been paying attention to the issues of environmental protection and net zero carbon emissions in recent years. In addition to actively checking the carbon emissions at each stage of production before reaching net zero carbon emissions step by step, Acelon has invested in equipment replacement with a view to saving energy and expecting to reduce carbon emissions by 2,600 tons of CO₂ every year from year 2023.

In response to the environmental issues of circular economy and renewable resources to replace the petroleum ones, Acelon will present "recycled materials" and "renewable resources" as the cores in TITAS 2022, showing not only the recycled and reused materials, but the process of replacing potentially depleted petrochemical resources with renewable ones and eco-friendly process in cellulose filament production.

◆ **Dope dyed Color Yarn- AceColor®**

In order to assist textile industry and retail brands in saving energy and chemicals, Acelon supplies dope dyed color yarn in polyester, nylon, polypropylene and recycled materials. AceColor® technology has significantly reduced the amount of wastewater discharge and the impacts of the environment by removing the dyeing process. This contributes to drastically reduce energy consumption and greenhouse gas emissions. Textiles made with AceColor® can improve the performance of color fastness.

◆ **Recycled Yarn- AceEco®**

Recycled polyester yarns are made with PCR post-consumer recycled PET bottles. Recycled nylon yarns are PIR recycled from offgrade yarns. To reuse materials equals to prevent them become wastes and it can decrease environmental impacts such as the consumption of petrochemical resources and energy use by more than 70%. It is now the most preferred materials for mainstream brands.

◆ **Biobased Nylon- AceEco-Bio410**

AceEco-Bio410 has an extremely low carbon footprint as well as 70% biobased from renewable resource castor oil plants. Only 1.9kgs is the total amount of carbon produced from the growing of

the castor oil plant to the completion of the polymer process including all the necessary transportation. There is an obvious difference between traditional NY6 & NY66 which have a carbon footprint of around 6.5kg. Textiles made with AceEco-Bio410 are light weight, fast dry, and comfortable feel.

◆ **Biodegradable yarn**

Acelon offers both synthetic yarns with CiCLO® technology and manmade cellulose filament which are biodegradable.

A. Synthetic NY6 and PET yarns made with CiCLO® technology

CiCLO® technology is a solution that could help mitigate the plastic microfiber pollution problem. Compost is not a customary disposal method for textiles and fugitive fibers do not end up in industrial composters. Fugitive microfibers usually end up in sea water, soil and waste-water treatment plants.

Textiles made with CiCLO® technology enhanced the fibers end up in environments where biodegradation can occur naturally, microbes are attracted to the fibers and can mineralize them at rates comparable to natural fibers, such as wool.

B. GreenCell® Lyocell filament

Acegreen , a 100% owned subsidiary of Acelon provides lyocell filament yarn which can be biodegraded within 180 days. It is also a compostable yarn.

Greencell® features good dry and wet strength which are superior to other cellulose yarns so textiles made with Greencell® is machine washable.

Greencell® is produced with environmentally responsible processes from wooden pulps. Materials are sourced from FSC certified plantations. The production process of Greencell® made with a circular production system, during which 99.5% of solvent and less-toxic chemicals can be recovered and recycled. While taking into account environmental protection, textiles made with Greencell® excellently feature silk-like elegant brightness, skin-friendly, moisture control properties.

Besides the above mentioned sustainable products, Acelon additionally offers DuraXtend®, the abrasion resistant yarn to prolong life time of textiles . Through completing sustainable materials and partnering with textile down streamers who owns professional capabilities in fabric design, high quality dyeing and finishing skills, as a part of this earth, Acelon continuously strives to create more diversities and values to textile industry.

Welcome to visit Acelon at N501, TITAS 2022!

For more information, please visit <https://www.acelon.com.tw/en>



AceEco-Bio410- very low carbon footprint.



DuraXtend® - to extend life of textiles



AceColor®Eco-Recycled dope dyed yarn



Greencell® Lyocell filament