

南亞 tairilin



新世紀環保纖維

Eco-friendly green Fibers



新世紀環保纖維

Eco-friendly green Fibers

南亞塑膠公司纖維事業部基於為地球生態一份子，積極針對環保議題開發符合環境方案之綠色纖維，其中包含聚酯回收纖維(ECOGREEN®)：回收使用後的聚酯寶特瓶，再製造為聚酯纖維減少聚酯廢料產生；常壓可染聚酯纖維(ECODYE®)：改變分子結構讓原必須於130°C染色之聚酯纖維，於100°C即可上色，減少能源損耗；非重金屬觸媒聚酯纖維(ECOFIT®)：將原聚酯纖維聚合時所使用的重金屬觸媒改為非重金屬觸媒，減少重金屬對環境之傷害。

Being a part of the ecosystem, the Polyester Fiber Division of Nan Ya Plastics Corporation has developed a series of eco-friendly green fibers to address current environmental issues. Its Recycled Polyester Fiber ECOGREEN® reprocesses recycled used polyester bottles to produce polyester fibers and in turn reduces polyester waste. Its Normal Pressure Dyeable Polyester Fiber ECODYE® changes the molecular structure of regular polyester fibers to reduce the temperature required for the dyeing process from the original 130°C to approximately 100°C and in turn saves energy. Its Heavy Metal Free Polyester Fiber ECOFIT® uses non-heavy metal catalysts instead of heavy metal catalysts in the process of polymerization and in turn lessens the harm heavy metals do to the environment.

回收聚酯纖維 ECOGREEN®

因為寶特瓶使用方便造成人類大量使用，但由於使用後的保特瓶不容易腐化分解，而且體積蓬鬆占空間，往往減短垃圾掩埋場的壽命，對地狹人稠的地球來說，如何有效處理廢棄保特瓶，已成為最大的課題。

回收使用後之保特瓶除可減少環境負擔，回收再生的聚酯纖維亦可有效減少自然資源的耗損，達到節能減廢/重覆使用/再生循環的3R環保訴求。

南亞以回收保特瓶為原料，經化學回收反應再生為聚酯絲，回收聚酯絲與一般生產之聚酯絲物性差異不大，並可加入吸濕排汗、抗紫外線、彈性...等機能，可廣泛用於各種用途。

Recycled Polyester Fiber – ECOGREEN®

The polyester bottles is so handy that human beings just cannot without them however, polyester bottles is not only extremely difficult to decompose but also occupy lots of space. The consequence is shorter the life of landfills. How to effectively use discarded polyester bottles becomes an essential issue.

To recycle used polyester bottles could reduce the loading from the earth. Moreover the recycled and regenerative polyester can effectively conserve natural resources to match the 3R environmental demands Reduce/Reuse/Recycle.

Nan Ya Plastics Corporation reprocesses recycled polyester bottles to produce polyester fibers by chemical recycling process. The property of such recycled polyester fibers is not very different from that of regular polyester fibers. It can be built in functions such as quick dry, UV-CUT, stretch and so on. Therefore, they can be used in a wide variety of applications.



常壓可染聚酯纖維 ECODYE®

一般聚酯纖維原本分子間緊密結構需要在高溫高壓下，染料分子才能進入纖維內部達到上色效果，而常壓可染聚酯纖維(ECODYE®)經特殊改質技術，讓染料在95°C~100°C下就可以進入纖維內部達到相同之染色效果。

因常壓可染聚酯纖維(ECODYE®)可使染色溫度降至100°C，除了能減少熱能使用、降低地球暖化速率及避免資源枯竭外，也可減少昇降溫時間降低染色成本。同時因為染色溫度降低，故適合與蠶絲、羊毛、Rayon、Nylon及Lycra等纖維交織/混紡，減少高溫對纖維造成之傷害。另外常壓可染聚酯纖維(ECODYE®)與一般聚酯纖維交織時因為上色率差異，布面外觀可呈現深淺色效果(tone on tone)。



Normal Pressure Dyeable Polyester Fiber – ECODYE®

The inherent molecular structure of regular polyester fibers is very tight. Therefore, high temperature and high pressure are required for dye molecules to penetrate the fibers. Nan Ya Plastics Corporation utilizes special techniques to modify its Normal Pressure Dyeable Polyester Fiber ECODYE®, allowing dye molecules to penetrate the fibers at 95°C - 100°C and kept the same dyeing effect.

Since Normal Pressure Dyeable Polyester Fiber ECODYE® can reduce the temperature required for dyeing from 130°C to 100°C, it helps save heating energy, slow down global warming and prevent exhaustion of resources. Moreover, since the dyeing time is reduced, the cost of dyeing is reduced as a result. Additionally, the reduction in dyeing temperature enables ECODYE® to be blended/interwoven with other fibers that require a low dyeing temperature, such as silk, wool, rayon, nylon as well as Lycra-based elastic yarns. When ECODYE® is blended/interwoven with regular polyester fibers, the resultant fabrics tend to feature a beautiful tone-on-tone surface effect as a result of the difference in dyeing rate.

無重金屬聚酯纖維 ECOFIT®

一般聚酯纖維於合成時為有效增加聚合效率必須添加觸媒減少聚合時間，傳統多使用含銻的重金屬觸媒。含微量銻的織物對人體雖不致有傷害，但對環境仍有一定的衝擊。因此歐盟於法規中規定，織物中銻含量需低於260ppm才有資格取得“ECO標籤”。

南亞的ECOFIT®使用新型的非銻觸媒，故纖維中不含重金屬成分。其生產之聚酯纖維與一般聚酯纖維物性相當，並且克服一般非銻觸媒聚酯纖維色澤偏黃之缺點。可廣泛用於各類紡織品、寶特瓶及回收再利用。



Heavy Metal FREE Polyester Fiber – ECOFIT®

In the process of producing polyester, catalysts are often added to reduce the time required for polymerization and significantly increase the polymerization efficiency. The most common catalyst is a heavy metal called antimony. Though it doesn't pose any risk with exposure to the fabrics, it still makes some impact to environment. The European Union (EU) has also stipulated in its legislation that antimony (Sb)<260 ppm qualify for the application of "ECO labels".

ECOFIT® use new type Sb-free catalysts to ensure the polyester contain no heavy metal. ECOFIT® fibers have a property equivalent to regular polyester fibers; moreover, they do not have the unfavorable yellowish shades which regular Sb-free catalyst polyester fibers usually have. It can apply to textile, bottles and can be recycled and reprocessed.



南亞塑膠工業股份有限公司
NAN YA PLASTICS CORPORATION

POLYESTER FIBER DIV.

營業處：台北市敦化北路201號

201, TUN HWA N. ROAD, TAIPEI, TAIWAN

TEL : 886-2-27178330~34 FAX : 886-2-27186311

e-mail : 656565@npc.com.tw

開發組：台北縣泰山鄉大科村南林路100號

100, NAN LIN RD., DAH-KO CHUN, TAISAN HSIANG,
TAIPEI HSIEN, TAIWAN

TEL : 886-2-29019141EXT2001~2003

FAX : 886-2-29041384

e-mail : mingyu@npc.com.tw