



CE-SC5-01-2018

REACT

Full Title: REcycling of waste ACrylic Textiles

Aim:

The REACT proposal will address the management of waste acrylic textiles coming from outdoor awnings and furnishing. The final goal of the project is a fully compatible recycled acrylic textile for reuse and guidelines for the removal of hazardous chemicals from finished textiles with innovative investigation techniques.

Concept:

The REACT proposal will address the management of waste acrylic textiles coming from outdoor awnings and furnishing. A key issue is the analysis and removal of finishing substances (fluorocarbons, melamine and acrylic resins, and anti-mould agents) that affect the secondary raw material purity and their management. A mechanical recycling process will be implemented to obtain second life fibre and fabrics that will be performance tested to assess the best market application. A full environment friendly process to remove hazardous finishing materials in waste acrylic textiles will be investigated and developed to enhance their recycling, improve sustainability and reduce environmental and health risks. The removing of finishing products via chemical reactions will involve the combination of many factors and has not previously been studied in this sector.

Start date:

01/06/2019

End date:

31/03/2022

