

Cardanol Bio-based Plasticizer

Contact the Project Consortium

Massimiliano Calò

Tel. +39 0832 631702
Email cip2012.placard@gmail.com
Website www.placard-ecoinnovation.eu



Partners of the Consortium

www.placard-ecoinnovation.eu



UNIVERSITÀ
DEL SALENTO



Co-founded by the Eco-innovation
Initiative of the European Union

This publication has been produced with the assistance of the European Union. The contents of this publication are the sole responsibility of the consortium partners and can in no way be taken to reflect the views of the European Union.



About Placard

The Placard project proposes the production and application of a new bio-based plasticizer for soft PVC applications.

The aim of the project is to substitute traditional plasticizers with a bio-based one obtained by chemical modification of cardanol, an industrial grade oil obtained by vacuum distillation of cashew nut shell liquid.

Placard is a natural derived by-product of the food industry, therefore does not contribute to the subtraction of resources to the food chain.

Tests have proved the process stable and able to control the reaction adequately to produce the selected quality with consistency. The production of Placard has been scaled-up in a medium scale industrial plant.

Advantages of Placard

- Physical and mechanical properties have been proven comparable with the ones of the phthalate plasticizer.
- It is characterized by a reduced migration.
- The volatility at room temperature is very low and comparable to that of DEHP.
- Its gelation properties are comparable to those of DEHP, which involves a very low interaction with the polymer at room temperature.
- Processing conditions are very similar to those used for traditional PVC.
- It can be used in standard soft PVC processing equipment.

