



PolyUrethane Recycling Towards
a Smart Circular Economy

Deliverable

D1.5 Portfolio of foam-compatible CAPU co-monomers via propoxylation

WP1 – CAPU co-monomers

Project Information

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Publishable Summary

The PUREsmart project targets innovative solutions for polyurethane foam recycling. With the Smart Design objectives, it is the aim to introduce innovative chemical building blocks (called CAPU comonomers) into polyurethane formulations that can substantially increase the intrinsic recyclability of these materials. In this deliverable, we report the identification of several such building blocks that were found to be indeed useful for the preparation of flexible foam polyurethane materials in particular. The resulting portfolio of building blocks allows the systematic investigation of PU foam materials in order to improve both their material properties, and to achieve an improved recyclability. Next to monomers that are already available on the market for other applications, this deliverable also identifies some completely new PU foam monomers.