



PolyUrethane Recycling Towards  
a Smart Circular Economy

## Deliverable

D4.5 CAPU foam produced using recycled polyol, and optionally, TDI recovered from chemolysis

WP5 – Smart Design

### Project Information

Grant Agreement n°	814543
Dates	1st January 2019 – 31st December 2022

#### PROPRIETARY RIGHTS STATEMENT

This document contains information, which is proprietary to the PURESMArt Consortium.  
Neither this document nor the information contained herein shall be used, duplicated or communicated by any means to any third party, in whole or in parts, except with prior written consent of the PURESMArt consortium.

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 814543.

The PUReSmart project results presented reflect only the author's view. The Commission is not responsible for any use that may be made of the information it contains.

PUReSmart RESTRICTED - Under Consortium Agreement, Confidential until Oct 1st 2026.



## Publishable Summary

CAPU foams were produced using recycled polyol and TDI recovered from chemolysis. No major difference was observed when replacing (part of) the raw materials with their recycled equivalent, confirming the relevance of the approach.

Those results open the way for CAPU foams made from recycled raw materials recovered from chemolysis. This is a very good proof of concept that old end-of-life PU foams could be used and valorized into a new type of intrinsically recyclable CAPU foams. If the CAPU can be further optimized, this would allow to close the loop and make from a long lasting waste and long lasting, fully circular material.