



**Desmodur<sup>®</sup> eco**

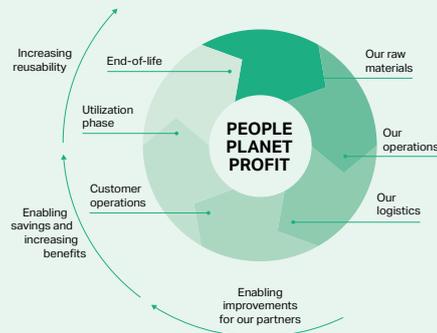
High performance enabled by nature:  
First partially bio-based crosslinker.



# Desmodur® eco N 7300. High performance enabled by nature: First partially bio-based crosslinker

## Sustainability – lifecycle thinking

Covestro pursues a holistic approach and views value creation cycles in their entirety – with sustainability in mind at all times.

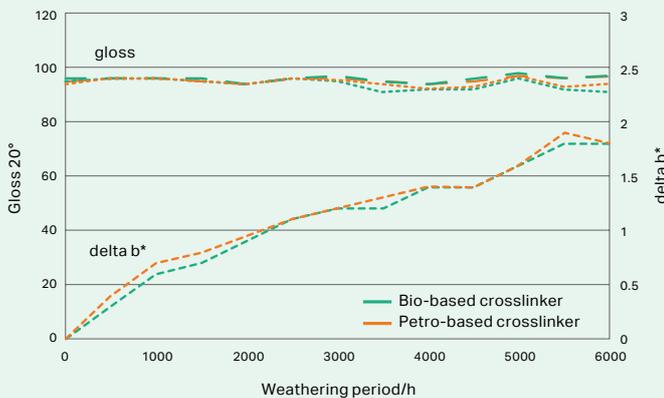


Sustainability has an increasing impact on the product and raw material purchasing decisions of customers, brand owners and consumers.

Although several partially bio-based polyol solutions have existed, up to now the limiting factor in developing partially bio-based polyurethanes has been the need for polyurethane crosslinkers based on renewable feedstock.

Covestro has solved another part of the puzzle of how to develop more sustainable polyurethanes with the release of Desmodur® eco N 7300. This is a new near zero VOC aliphatic polyisocyanate, and the first polyurethane crosslinker on the market with a significant renewable content that has not come at the expense of performance\*.

## Gloss and yellowing during weathering referring to SAE J 2527 in auto OEM formulation



## Key benefits of Desmodur® eco N 7300:

- 70% renewable carbon content\*\* derived from non-fossil-based inputs, with no direct competition with the food chain
- Significantly reduces the cradle-to-gate carbon footprint in comparison to HDI derivatives
- Trimer based on a new aliphatic isocyanate pentamethylene diisocyanate (PDI), a new innovation in polyurethane chemistry, as it is the first diisocyanate in 30 years to be fully developed and scaled-up
- Near drop-in for hexamethylene diisocyanate (HDI)-based trimers, i.e., reformulation requirement low
- Same high-performance standards as HDI derivatives
- Broader formulation flexibility than HDI-based products due to superior compatibility

## Product specifications

~ 21.5% NCO

~ 9500 mPa · s at 23°C

< 0.3% PDI monomer

70% renewable content\*\*

< 100 Hazen

## Applications:

Coatings, adhesives and much more – you can potentially use Desmodur® eco N 7300 wherever HDI trimers are used.

\* Commercially available in Europe.

\*\* Value based on theoretical calculation (68 ± 4% renewable carbon, 14C measurement according to ASTM-D6866 standard).



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<sup>1</sup>) Please see the "Guidance on Use of Covestro Products in a Medical Application" document. Edition: 2021 · Printed in Germany