



**Desmodur<sup>®</sup> eco**

High performance enabled by nature:  
First bio-based crosslinker

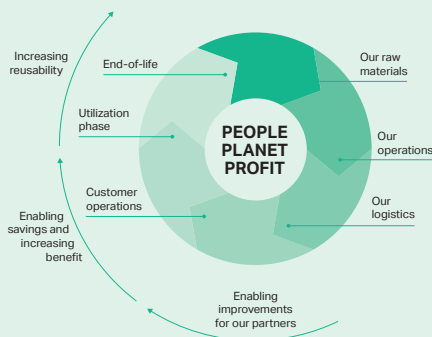


# Desmodur® eco N 7300

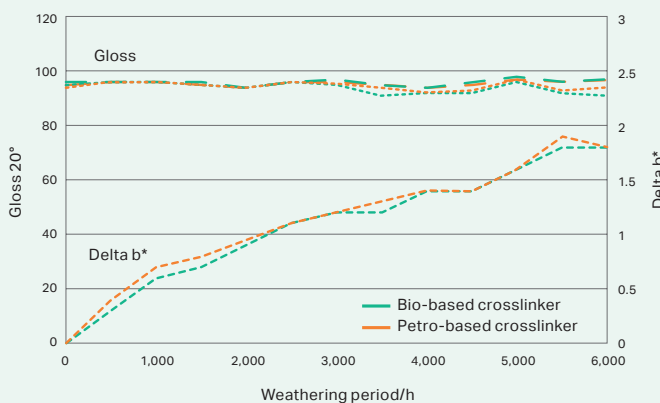
## High performance enabled by nature: First bio-based crosslinker

### Sustainability – lifecycle thinking

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



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



### Product specifications

~ 21.9% NCO

~ 9,500 mPa · s at 23°C

< 0.3% PDI monomer

~ 70% renewable content\*\*

< 60 Hazen

Sustainability is increasingly impacting on the product and raw material purchasing decisions of customers, brand owners and consumers.

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

But now 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 solvent-free aliphatic polyisocyanate, and the first polyurethane crosslinker on the market with a significant renewable content that has not come at the expense of performance.\*

### Key benefits of Desmodur® eco N 7300:

- ~ 70% renewable carbon content\*\* derived from non-fossil-based inputs, the biomass source is mainly starch from non-edible plants (field corn)
- It has a significantly reduced carbon footprint compared to HDI derivatives\*\*\*
- Trimer based on a new aliphatic isocyanate pentamethylene diisocyanate (PDI), a revolutionary 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

### 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, <sup>14</sup>C measurement according to ASTM-D6866 standard).

\*\*\* Compared to ALIPA industry average data for aliphatic isocyanates.



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