



FAST CURING

LONG POT LIFE

Safe high-speed crosslinker for  
1K waterborne lamination adhesives

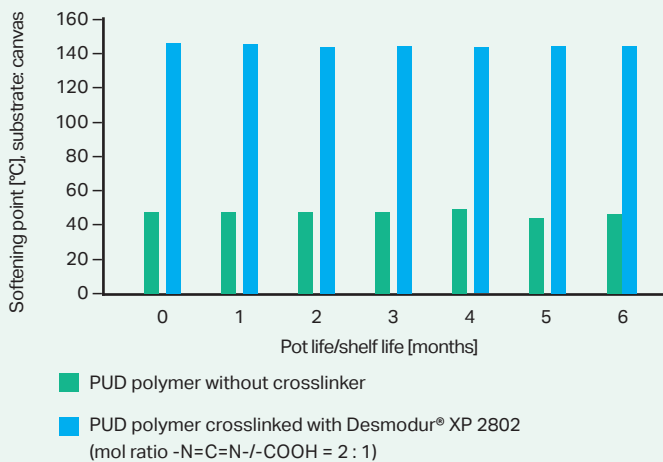
**Desmodur<sup>®</sup>**



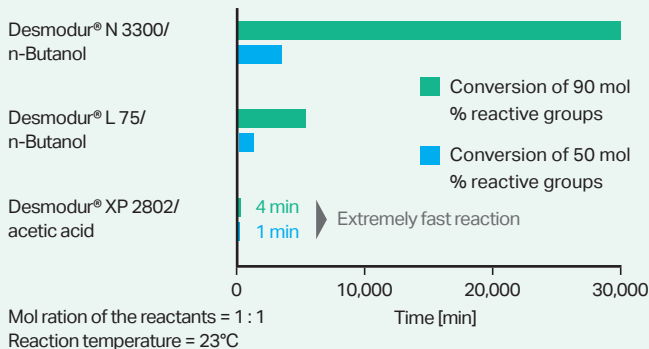
# Desmodur® XP 2802

## Safe high-speed crosslinker for 1K waterborne lamination adhesives

### Incorporation into a WB 1K adhesive formulation leads to higher performance without compromising pot life



### No delay in downstream processing (e.g., slitting) due to sufficient instant curing



Desmodur® XP 2802 is a waterborne dispersion of a hydrophilically modified, polyfunctional carbodiimide based on aliphatic raw materials. It can be used as a crosslinker for carboxyl group-containing waterborne adhesives for various applications, such as packaging lamination and shoe manufacturing.

Desmodur® XP 2802 can be used in adhesive formulations for roll-to-roll applications, such as flexible packaging lamination, with following advantages:

- Instant bonding at room temperature for very fast further processing (no hot room storage needed)
- One-component processing prevents mixing failures and adhesive waste
- Maximized food safety due to aliphatic nature when used in combination with aliphatic reaction partner
- Improves chemical & thermal resistance of adhesive layer
- Maintains brilliant finishes of adhesives that are applied on top of a print
- Pot life up to six months (pH 7–9)

The reactive dispersion of carboxyl group-containing polymer (e.g., Dispercoll® U XP 2643 or Dispercoll® U 2824 XP) and Desmodur® XP 2802 has a pot life of up to six months, providing the pH of the reactive dispersion is in the 7–9 range. This long pot life is achieved by the phase separation of the polycarbodiimide droplets and the polymer droplets in the reactive dispersion. After evaporating the water of the reactive adhesive dispersion, the polycarbodiimide droplets and the polymer droplets form a homogeneous film. Simultaneously, the reactive groups get in contact with each other and the crosslinking reaction runs with high velocity.

To get the maximum performance out of this technology, it is highly recommended to use approx. 2 mol carbodiimide segments (-N=C=N-) per mol carboxyl groups (-COOH) in the polymer. Desmodur® XP 2802 meets the safety requirements of key regulations:

- Commission Regulation (EU) No. 10/2011
- FDA Regulations in 21 CFR 175.105 (adhesives)

On request, we can provide a corresponding statement on food contact use.



This information and our technical advice – whether verbal, in writing or by ways of trial – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. The information is provided by Covestro without assumption of any liability. If any of the above mentioned regulations change after the date of declaration, this declaration is no longer valid. Covestro will strive to keep this information up-to-date. Our advice does not release you from the obligation to verify the information provided – especially that contained in our safety data and technical information sheets –, to check for updates of any information provided by us and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery. Edition: 2019 · Order No.: COV00086527 · Printed in Germany · E



Covestro Deutschland AG  
Business Unit Coatings,  
Adhesives & Specialties  
51365 Leverkusen  
Germany

www.coatings.covestro.com  
cas-info@covestro.com