



**Desmodur® 2802**

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



**Desmodur® 2802** is a waterborne dispersion of a hydrophilically modified, polyfunctional carbodiimide based on aliphatic raw materials. It can be used as a crosslinker for waterborne 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
- Improved 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 6 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® 2802** has a pot life of up to six months, provided 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 and the polymer droplets in the reactive dispersion. After evaporating the water of the reactive adhesive dispersion, the polycarbodiimide and the polymer droplets form a homogeneous film. Simultaneously, the reactive groups come into 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® 2802** meets the safety requirements of key regulations:

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

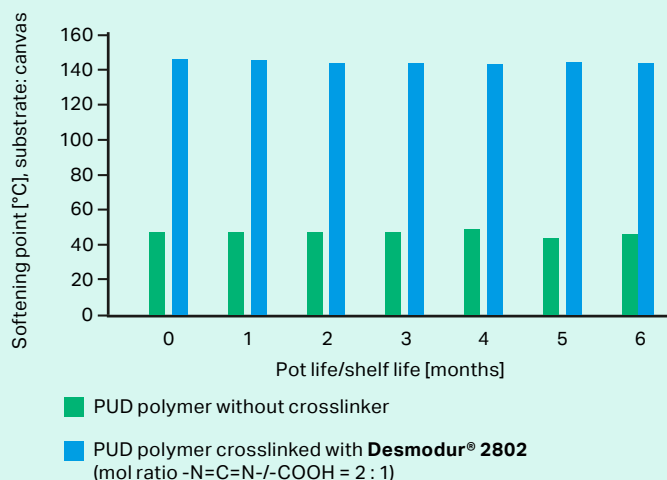
On request, we can provide a corresponding statement on food-contact use.



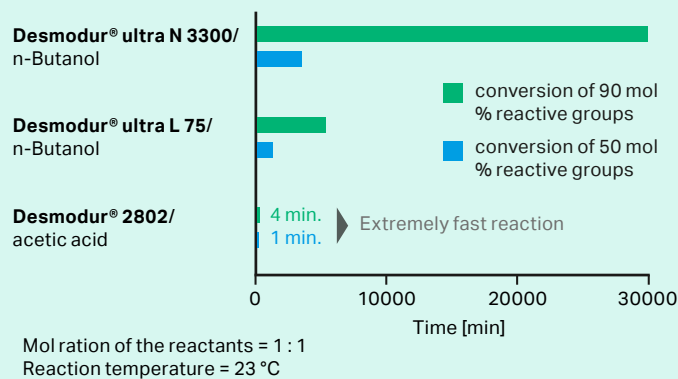
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## Incorporation into a WB 1K adhesive formulation leads to higher performance without compromising pot life



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



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