**Chemical nature**

Aqueous dispersion of a polyester-polyurethane elastomer

**Technical data**

- **Solid content**: approx. 40 %
- **pH**: approx. 8
- **Viscosity**: approx. 40 mPas
- **Glass transition temperature**: approx. –46 °C

For detailed information see Specification Data-Sheet.

**Application area**

Epotal P100 ECO is a waterborne adhesive raw material which is compostable according to EN 13432. The adhesive is particularly suited for the production of multi-layer films based on a broad variety of compostable films and paper. The laminate has a high initial bond strength enabling direct further converting.

**Processing**

It is recommend applying Epotal P100 ECO by reverse gravure coating. For direct gravure coating the usage of a smoothing bar helps achieving a good coating quality. The smoothing bar should be operated against the web direction.

It is strongly advised to add a water-emulsifiable, polyfunctional isocyanate crosslinker such as Basonat® LR 9056 to improve the overall performance of the adhesive.

We recommend a concentration of 3 % of Basonat LR 9056 based on wet Epotal P100 ECO. The pot-life of the formulated adhesive after addition of the Basonat LR 9056 is approximately 4 hours at room temperature. In order to achieve a good coating quality it is recommended to minimize pot-life as much as possible.

When Epotal P100 ECO is applied by gravure coating a defoamer and a wetting agent is recommended. A possible defoamer is Tego® Antifoam 4-94 with an amount of up to 0.1 %. As wetting agent Lumiten® I-SC is recommended at an amount of up to 0.5 %. The Lumiten I-SC needs to be added while stirring 12 h before applying the adhesive.

If thickeners are added or if Epotal P100 ECO is mixed with other products, it is important to make sure that none of the components has a pH of lower than 7 in order to prevent coagulation. Epotal P100 ECO can only be mixed with anionic dispersions or with dispersions that contain a protective colloid.

Following formulation is recommended and complaint to the composting norm EN 13432.

100 parts Epotal P100 ECO
3 parts Basonat LR 9056
0.5 parts Lumiten I-SC

Manufacturers must carefully carry out their own trials when developing adhesives based on Epotal P100 ECO, as there is a host of factors in production and processing that we cannot cover exhaustively in our trials which can influence compatibility with other components of the adhesives, their wetting of and adhesion to different substrates etc.

Container, pipes and other equipment that come into contact with Epotal P100 ECO must be made of corrosion-resistant materials such as 18/8 stainless steel or plastics to prevent coagulation.

Particular attention is drawn to the fact that polyurethanes can be affected by oxidation and by exposure to heat, and comprehensive tests therefore need to be performed on adhesive formulations.
The data contained in this publication are based on our current knowledge and experience. They do not constitute the agreed contractual quality of the product and, in view of the many factors that may affect processing and application of our products, do not relieve processors from carrying out their own investigations and tests. The agreed contractual quality of the product at the time of transfer of risk is based solely on the data in the specification data sheet. Any descriptions, drawings, photographs, data, proportions, weights, etc. given in this publication may change without prior information. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.

Edition: April 2015

This data sheet will be rendered invalid if it is superseded by a later version.

® = registered trademark of BASF SE