

Epotal® P 100 ECO

Adhesive Raw Materials



Chemical Nature

Aqueous dispersion of a polyester-polyurethane elastomer

Technical Data

Solids content	approx. 40 %
pH	approx. 8
Viscosity	approx. 40 mPas
Glass transition temperature	approx. -46 °C
Water absorption of film after 24 h	approx. 7 %
Tensile strength of film	approx. 16 N/mm ²
Elongation at break	approx. 700 %

The exact specifications can be found in the specification data sheet.

Advantages

The adhesive film that Epotal P 100 ECO yields is compostable according to the norm EN 13432.

Epotal P 100 ECO is used in the manufacture of adhesives for laminating different polymer film and paper multi-layer structures.

The produced laminate has a high initial bond strength enabling direct further converting.

Applications

In order to prevent coagulation, it is important to make sure that none of the components has a pH of less than 7 when thickeners are added or when Epotal P 100 ECO is mixed with other products. Epotal P 100 ECO can only be mixed with anionic dispersions or with dispersions that contain a protective colloid.

Container, pipes and other equipment that come into contact with Epotal P 100 ECO must be made of corrosion-resistant materials such as 18/8 stainless steel or plastics to prevent coagulation.

It is advised to use specially developed water-emulsifiable, polyfunctional isocyanates such as Basonat® LR 9056 to improve the overall performance of the adhesive.

The potlife of the adhesive depends on the reactivity of the isocyanate used, and this has to be determined in trials.

We recommend applying Epotal P 100 ECO by gravure coating. When Epotal P 100 ECO is applied by gravure coating an emulsifier such as Lumiten® I-SC should be added to the polymer dispersion at a rate of up to 1 % in order to promote the wetting of the substrate during coating.

We advise adding a preservative to adhesives based on Epotal P 100 ECO to protect them from microbial attack. The suitability of such additives must be verified and monitored in trials.

Manufacturers must carefully carry out their own trials when developing adhesives based on Epotal P 100 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.

Particular attention is drawn to the fact that polyurethanes can be affected by hydrolysis and by exposure to heat, and comprehensive tests therefore need to be performed on adhesive formulations.

BASF SE
Strategic Business Unit
Polymer Dispersions for Adhesives
67056 Ludwigshafen, Germany

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: May 2011

TI/ED 2074 e

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

www.basf.de/dispersions

® = Registered trademark of BASF SE