Technical Information

Luphen® 700
Adhesive Raw Materials

Chemical nature
Aqueous dispersion of a polyester-polyurethane elastomer

Technical data
| Solids content | approx. 37 % |
| pH            | approx. 8   |
| Viscosity     | approx. 15 – 40 sec |
| Glass transition temperature | approx. – 30 °C |
| Tensile strength of film | approx. 15 N/mm² |
| Elongation at break | approx. 800 % |

For detailed information see Specifica-
data sheet.

Application area
Luphen 700 is a water-based primer and topcoat for polymeric films. As a primer it has excellent performance formulations based on Luphen 700, as in extrusion lamination processes.

Processing
We recommend applying Luphen 700 by gravure coating.
In order to promote wetting of Luphen 700 based primers, an emulsifier such as Lumiten® I-SC can be added to the dispersion at a rate of up to 1%.

Addition of water-emulsifiable, poly-functional aliphatic isocyanates such as Basonat® LR 9056 can improve heat and moisture resistance of the product.
We recommend a concentration of 1–5% of Basonat LR 9056 based on the wet Luphen 700.
The pot-life of the mixture with Basonat LR 9056 is approximately 4 – 6 hours at room temperature.
 Manufacturers must carefully carry out their own trials when developing formulations based on Luphen 700, 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 product, their wetting of and adhesion to different substrates etc.
If Luphen 700 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. Luphen 700 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 Luphen 700 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 or by exposure to heat, and comprehensive tests therefore need to be performed on 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.

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