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TECHNICAL INFORMATION

BEST-PL 5176

BEST-PL 5176 is a one-component, solvent-free, adhesive based on a modified acrylic resin. One of its special features is its low odour.

BEST-PL 5176 cures by exposure to UV light with a wave length of 315 – 400 nm. At least one of the adherends has to be permeable to UVA-light. After sufficient exposure the product cures completely. Curing parameter depend on material thickness and absorption, adhesive layer thickness and absorption, type of lamp and the distance between light source and the adhesive film.

Due to its high viscosity and its good adhesion on glass, metals and synthetic materials **BEST-PL 5176** is preferably used for bonding of those materials. Apply product on bonding surfaces, assemble parts and expose to UVA-light of appropriate wave length. The curing mechanism allows an adjustment of parts shortly after application but <u>before</u> exposure. The flexibility of the product makes tension-equalising bonding of materials with different thermal expansion coefficients possible.

BEST-PL 5176 is ready to use and can be applied directly from the original container or with suitable dosing units. Bonding surfaces should be dry and free of dust, grease and other contaminants.

PROPERTIES (liquid product)

Chemical type Modified acrylate

Curing system UVA light

Appearance Clear/colourless

Viscosity (Brookfield) Approx. 1500 mPas

Density (DIN 51757) approx. 0,9 x 10³kg/m³

Shelf life

(Storage in unopened original container at 10°C up to 23°C)

At least 6 months

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STRENGTH VALUES (cured product)

Tensile strength (DIN 53504) 15 N/mm²

Elongation at break (DIN 53504) 300 %

Shear strength glass/glass 23 Nmm²

Shear strength glass/aluminum 17 Nmm²

Surface after cure sticky, not completely dry

Shore hardness A (DIN 53505) 30

Shore hardness B (DIN 53505) 10

Temperature range $-60^{\circ}\text{C} - +120^{\circ}\text{C}$

HEALTH AND SAFETY STANDARDS

Irritating to eyes, respiratory system and skin. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. After contact with skin wash off immediately with plenty of water and soap. For further information please see corresponding material safety data sheets.

General

The data and information above correspond to the current know-how of BEST-Klebstoffe GmbH & Co.KG. Our information and data have been developed from laboratory tests and extensive practical experience. It is the user's responsibility to perform receiving inspections and to determine suitability for the user's purpose of any production methods. We disclaim all warranties expressed or implied, that any product will have specific properties for a particular purpose. BEST-Klebstoffe GmbH & Co. KG reserves the right to change the contents of this document as necessary.

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