

## TECHNICAL DATA SHEET

## ACROBOND PU 221 D3

### GENERAL CHARACTERISTICS / MAIN USE : **Low density edge bordering resin for honeycomb panels**

Special low density and rigid 2-component polyurethane resin (resin + hardener) for edge bordering / peripheral sealing of honeycomb panels and bonding with good adhesion properties to metals such as treated or coated aluminium and steel but also to wood, fibre reinforced Polyester and a lot of other materials. In some special cases (depending on required viscosity) this insulating resin can also be used for potting of various electronic parts.

### TECHNICAL CHARACTERISTICS OF PRODUCT :

<b>Chemical base</b>	PU, fillers et additives ; has to be used with ACROCURE ISO 400 (isocyanate).
<b>Colour</b>	Beige to light green, special colours only on request.
<b>Consistency</b>	Thixotropic liquid, easy to apply by extrusion.
<b>Density</b>	~ 0,81 g/cm <sup>3</sup> for resin, ~ 1,23 g/cm <sup>3</sup> for hardener and ~ 0,90 g/cm <sup>3</sup> for A+B mixture
<b>Mixing ratio A:B</b>	2,6:1 by weight and <b>4:1 by volume</b> with ACROCURE ISO 400
<b>Viscosity Brookfield RVT</b>	~ 15000 mPa.s for resin (stirred) and medium thixotropy for mixture
<b>Pot-life for 100g mixture</b>	~ 35 minutes with ACROCURE ISO 400
<b>Cured adhesive film</b>	Low density, viscous-hard, cohesive; good adhesive and ageing properties.
<b>Hardness</b>	~ 45 Shore D after 7 days curing time at room temperature.

### PREPARATION AND PROCESSING :

<b>Materials and Surfaces</b>	The surfaces to be bonded must be clean, dry and free of dust and grease. Store the materials and process in dry places and not below +15 °C. Some metals must normally be prepared for bonding, possibly sanded. A primer coat may also be applied in some special cases. Our technical department is available for any further questions.
<b>Preparation of adhesive</b>	Add the recommended hardener in the right ratio and stir / mix well until obtaining an homogenous mixture which has imperatively to be used within the pot-life.
<b>Hardener</b>	ACROCURE ISO 400. For other (flexible) hardeners, please consult us.
<b>Bonding</b>	Apply immediately by extrusion the fresh stirred mixture of resin + hardener as regularly as possible inside the aluminium honeycomb or into the parts to be sealed.
<b>Joining</b>	After a few minutes the bonded sandwich panels can be joined / closed and pressed during the required curing time for adhesive and resin itself. Take care not to introduce air bubbles while joining.
<b>Pressing</b>	Press both materials together under vacuum-press (0,5 kg/cm <sup>2</sup> ) during the curing-time which is approximately 8 times the pot-life for a constant temperature. Adhesive cures with very low shrinkage and can be exposed to light strength after pressing-time. Terminal strength is reached after ~ 48 hours depending on temperature. Higher temperatures will shorten the curing time, lower ones will lengthen it.
<b>Alternatives</b>	Other products are available with different viscosity / thixotropy and pot-life. Further, we recommend to consult our general PU information brochure.
<b>Dilution / Cleaner</b>	Use exclusively our cleaner/solvent ACRODIS CL for the uncured adhesive.

### RECOMMENDATIONS / STORAGE / SAFETY :

<b>Storage</b>	Not longer than 12 months in a cool (+10 to +25 °C) and <u>dry place</u> in the original tightly closed packaging. Protect against freezing. Stir / remove before using.
<b>Packaging</b>	Drums of 150 kg resin and 250 kg hardener, other packaging on special request.
<b>Precautions</b>	Assure sufficient ventilation during processing. Avoid direct skin contact of the uncured adhesive/hardener mixture. Wear protective gloves and glasses.
<b>Labelling</b>	No labelling. Take the regular precautions for handling and processing PU products.
<b>Toxicity</b>	<b>None for resin, Harmful for hardener.</b> Safety data sheet available on request.
<b>General Information</b>	The foregoing information represents values obtained in our laboratory and has been supplied in good faith, it shall not be construed to be legally binding, in particular, it shall not exempt the purchaser from taking responsibility for testing the product supplied so as to determine its suitability for the intended application. Given the high number of materials appearing on the market and the different methods of use, which are beyond our influence and control, we cannot accept any responsibility for the results of your work. Warranty is made exclusively for the constantly high quality of our products. Please note our terms of sales, delivery and payment.