

## TECHNICAL DATA SHEET

## ACROBOND EP 242/9

### GENERAL CHARACTERISTICS / MAIN USE :

### Structural 2-part EP adhesive for honeycomb panels

2-component epoxy adhesive for bonding metals with especially good adhesive properties to aluminium and steel, coated metals, wood, fibre reinforced Polyester. For manufacturing of honeycomb panels, insulating panels, laminated units, glass foam and mineral fibres, rigid PU or PVC foam and non-wovens. For rigid thermoplastics such as PS, PUR, ABS and some more, we recommend to make some initial adhesion tests before first industrial using.

### TECHNICAL CHARACTERISTICS OF PRODUCT :

<b>Chemical base</b>	Resin: epoxy + fillers, Hardener: amine.
<b>Colour</b>	Resin: beige, Hardener: blue.
<b>Consistency</b>	Viscous liquid, easy to apply by spatula or extrusion system.
<b>Density</b>	~ 1,21 g/cm <sup>3</sup> for resin, ~ 0,98 g/cm <sup>3</sup> for hardener, ~ 1,16 g/cm <sup>3</sup> for A+B mixture
<b>Mixing ratio A:B</b>	<b>3,3:1 by weight</b> and 2,7 :1 by volume
<b>Viscosity Brookfield RVT</b>	~ 70 000 mPa.s for resin, ~ 10 000 mPa.s for hardener, ~ 30 000 mPa.s for mixture
<b>Pot-life for 100g mixture</b>	≤ 60 minutes
<b>Cured adhesive film</b>	Hard and very cohesive; good adhesive and ageing properties. Perpendicular tensile strength (EN 2243-4) alu / honeycomb 9 mm mesh : ~ 4,0 MPa.
<b>Shore Hardness</b>	~ 83 Shore D after 7 days curing time

### 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>Bonding</b>	Apply ~ 300 g/m <sup>2</sup> adhesive/hardener mixture regularly to the surfaces to be bonded, by spatula or extrusion system. In almost all cases, only one side has to be coated (most compact material if possible). Layer thickness depends on material consistency.
<b>Joining</b>	Immediately after coating or within the open-time, both materials have to be joined together. Take care not to introduce air while joining. For adhesive / hardener mixture which is coated immediately after stirring in a thin layer (approx. 250µ = 300 g/m <sup>2</sup> ) the open-time is maximum twice the pot-life for a constant temperature.
<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. The adhesive will cure with very low shrinkage. The bond can be exposed to light strength after pressing-time. Terminal strength is reached after approx. 48 hours depending on the temperature. High temperatures shorten the curing time, lower ones will lengthen it.
<b>Curing conditions</b>	Best adhesion results are obtained for materials which have been pressed and cured at higher temperatures. So if possible, we recommend to work at least at +70 °C under a pressure close to 0,3 bar and a curing / pressing time of approximately 3 hours.
<b>Dilution / Cleaner</b>	Use exclusively our cleaner/solvent ACRODIS CL for the uncured adhesive.

### RECOMMENDATIONS / STORAGE / SAFETY :

<b>Storage</b>	24 months at +15 °C to +30 °C in the original tightly closed packaging. Stir before using.
<b>Packaging</b>	Cans of 23 kg resin + 7 kg hardener, drums of 220 kg resin / A + 180 kg hardener / B
<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>	<b>Resin: Irritant, Hardener: Corrosive.</b> Take the regular precautions for handling and processing Epoxy and Amine products. Read carefully our Safety Data Sheet.
<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.