

TECHNICAL DATA SHEET Edition 01 / 05.2008**ACROBOND® PU 214-10 + ISO 115****GENERAL CHARACTERISTICS / MAIN USE :****Structural 2-part PU adhesive, thixotropic**

Structural 2-part thixotropic polyurethane adhesive for bonding metallic inserts / mechanical fixations into honeycomb panels as well as for bonding metallic or composite tighteners on coated / painted coils and various sandwich panels. This adhesive is also suitable for bonding metals with especially good adhesive properties to coated aluminium and steel, wood, fibre reinforced Polyester, laminated units, glass foam, mineral fibres, non-wovens and some thermoplastic materials such as PUR, ABS, rigid PVC foam. Easy to apply in 400 ml cartridges with motionless mixer.

TECHNICAL CHARACTERISTICS OF PRODUCT :

Chemical base	PU, fillers and additives ; to be used in combination with part B based on isocyanates.
Colour	Black for part A (resin) / white for part B (hardener) = grey in mixture (optical control).
Consistency of mixture	Thixotropic, easy to apply by extrusion with motionless mixer.
Density	~ 1,3 g/cm ³ for part A, ~ 1,6 g/cm ³ for part B, ~ 1,45 g/cm ³ for A+B mixture
Mixing ratio A:B	1 : 1 by volume (resin : hardener)
Viscosity Brookfield RVT	~ 40 000 mPa.s for resin / part A, ~ 30 000 mPa.s for hardener / part-B
Pot-life for 100g mixture	~ 10 minutes for 100 g mixture at 20 °C.
Cured adhesive film	Viscous-hard and very cohesive; good adhesive and ageing properties.
Hardness	After 7 days ~ 80 Shore D.

PREPARATION AND PROCESSING :

Materials and Surfaces	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.
Preparation of adhesive	Add the recommended quantity hardener in the right ratio and stir / mix well until obtaining an homogenous mixture which has imperatively to be used within the pot-life.
Hardener	ACROCURE ISO 115 part B. For other (flexible) hardeners, please contact us.
Bonding	Apply adhesive/hardener mixture regularly to the surfaces to be bonded, by extrusion. In almost all cases, only one side has to be coated (most compact material if possible). Layer thickness should be close to 300 µ but depends on material consistency.
Joining	Immediately after coating or latest 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 film (approx. 300µ = 450 g/m ²) the open-time is at the maximum twice the pot-life for a constant temperature.
Pressing	Press both materials together under vacuum-press (0,5 kg/cm ²) 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 will shorten the curing time, lower ones do lengthen it.
Alternatives	Other products are available with different viscosity, thixotropy, pot-life and hardness.
Dilution / Cleaner	Use exclusively our cleaner/solvent ACRODIS CL for the uncured adhesive.

RECOMMENDATIONS / STORAGE / SAFETY :

Storage	Not longer than 12 months for the hardener ISO 115 and 24 months for the resin PU 214-10 in a cool (+10 to +25 °C) and dry place in the original tightly closed packaging.
Packaging	Seringues of 2x25 ml, cartridges of 2x200 ml and drums of 24 kg part A + 28 kg part B.
Precautions	Assure sufficient ventilation during processing. Avoid direct skin contact of the uncured adhesive/hardener mixture. Wear protective gloves and glasses.
Labelling	Harmful / part B. Take the regular precautions for handling / processing PU products.
Toxicity	None for resin, Harmful for hardener. Safety data sheet available on request.
General Information	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.