

TECHNICAL DATA SHEET

ACROBOND® PU 253 + ISO 400



GENERAL CHARACTERISTICS / MAIN USE :

2-part PU adhesive for sandwich panels

2-component polyurethane adhesive for bonding metals with especially good adhesive properties to coated aluminium and steel, wood, fibre reinforced Polyester. For the manufacture of honeycomb panels, insulating panels, laminated units, glass foam and mineral fibres, non-wovens and some thermoplastics such as PS, PUR, ABS, rigid PVC foam.

TECHNICAL CHARACTERISTICS OF PRODUCT :

Chemical base	PU, fillers et additives ; to be used in combination with ACROCURE ISO 50 or 400.
Colour	Beige, special colours only on request.
Consistency	Liquid, easy to apply by brush, Jofer roll-coater, air spray system or extrusion.
Density	~ 1,65 g/cm ³ for resin ~ 1,23 g/cm ³ for hardener ~ 1,58 g/cm ³ for A+B mixture
Mixing ratio A:B	5 : 1 by weight and 3,7 : 1 by volume with ACROCURE ISO 50 or ISO 400
Viscosity Brookfield RVT	~ 25000 mPa.s for resin, ~ 8000 mPa.s for mixture with ACROCURE ISO 400
Pot-life for 100g mixture	≤ 70 minutes with ACROCURE ISO 50 and ~ 60 minutes with ISO 400
Cured adhesive film	Viscous-hard and very cohesive; good adhesive and ageing properties.
Hardness	After 7 days approx. 75 Shore D with ISO 50, approx. 83 Shore D with ISO 400.

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 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 50 or ISO 400. For other (flexible) hardeners, please consult us.
Bonding	Apply adhesive/hardener mixture regularly to the surfaces to be bonded, by Jofer roll-coater, spatula or spraying system. In almost all cases, only one side has to be coated (most compact material if possible). Layer thickness depends on material consistency.
Joining	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 film (approx. 200µ = 300-350 g/m ²) the open-time is approximately 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 shorten the curing time, lower ones will lengthen it.
Alternatives	Other products are available with different viscosity, thixotropy, pot-life and hardness. Further, we recommend to consult our general PU information brochure.
Dilution / Cleaner	Use exclusively our cleaner/solvent ACRODIS CL for the uncured adhesive.

RECOMMENDATIONS / STORAGE / SAFETY :

Storage	Not longer than 12 months in a cool (+10 to +25°C) and dry place in the original tightly closed packaging. Protect against freezing. Stir / remove before using.
Packaging	Cans of 5 or 30 kg, drums of 300 kg.
Precautions	Assure sufficient ventilation during processing. Avoid direct skin contact of the uncured adhesive/hardener mixture. Wear protective gloves and glasses.
Labelling	No labelling. Take the regular precautions for handling and 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.

