

**Dow Automotive**

# BETALINK K1

## **Description / Application:**

BETALINK K1 is a one component, elastic and moisture curing adhesive based on polyurethane. BETALINK K1 is a high-elastic adhesive for plastics, composites and paints and can be bonded to themselves or in combination. BETALINK K1 is an adhesive for spoiler-bonding applications and is for this application TÜV-approved.

All Dow Automotive products are primarily developed in co-operation with the automobile manufacturers, according to their needs and their specifications; they are approved for the specific applications as defined by the customer.

The use of the product other than approved application have to be released in written form by the Technical Service of Dow Automotive.

## **Technical Data:**

<b>Composition</b>	polyurethane prepolymers
<b>Colour</b>	black
<b>Density</b>	1.20 g/cm <sup>3</sup> +/- 0.05 g/cm <sup>3</sup>
<b>Viscosity (Haake RU 20, 115 OSC, PK 2-1.0: D= 1s<sup>-1</sup>)</b>	< 260 Pa.s
<b>Skin Formation Time</b>	30 +/- 5 min
<b>Curing Speed</b>	> 3 mm / 24 h
<b>Application Temperature</b>	5°C to 35°C
<b>Open time</b>	max. 10 min
<b>Shrinkage (DIN 52 451) (14d RT+7d 70°C)</b>	approx. 5.5% +/- 0.5%
<b>Tensile Strength (DIN 53 504)</b>	2.6 +/- 0.3 MPa
<b>Elongation at break (DIN 53 504)</b>	approx. 450%
<b>Tear Strength (ASTM D 624 Form B)</b>	8 +/- 1 N/mm
<b>Shore A Hardness (DIN 53 505)</b>	40 +/- 5
<b>Lap Shear Strength (DIN 53 238)</b>	> 1.8 MPa (bond thickness: 2 mm)
<b>Temperature stability</b>	-40°C to 80°C (short term up to 120°C) in cured condition
<b>Resistance to chemicals</b>	Good against aqueous chemicals, gasoline and alcohol fairly good against esters, ketones, aromatic and chlorinated hydrocarbons.

<b>Range of Adhesion</b>	Suitable for use on sheet metal and coated, aluminium stainless steel, GRP, PUR-RIM, Polycarbonate, PUR-plasticised, PUR-hard, PVC, wood and glass. Do not use for direct-glazing
<b>Surface Preparation</b>	All surfaces must be free from dirt, dust, grease and oil. Use primers if necessary. Usually a cleaning with BETACLEAN 3350 is sufficient. In special cases and for a long term adhesive-bonded joint, partial pretreatment with activators and/or primers is necessary. We recommend BETAPRIME glass, BETAPRIME paint/plastic and BETAPRIME special plastic. Please call our technical department. <b>Attention:</b> Do not use alcohol or nitro-dilution for cleaning.
<b>BETAPRIME glass</b>	glass
<b>BETAPRIME paint/plastic</b>	paint, PUR, PUR-RIM, ABS, ABS modified, Noryl, Metton, glass-fibre reinforced polyester-resin, glass-fibre reinforced epoxy-resin.
<b>BETAPRIME special plastic</b>	Polyolefines (PP, PP-EPDM)  Preliminary tests are recommended
<b>Over-paintability</b> - paints without alcohol: - paints containing alcohol:	approx. 20 min after application approx. 60 to 90 min Preliminary tests are recommended
<b>Packaging</b>	Cartridge with 40 ml, 80 ml and 300 ml, sausages with 40 ml and 80 ml
<b>Dispensing Equipment</b>	For 300 ml cartridges use hand or air gun. We recommend air guns with rams. (i.e. BETAPRESS) For 40 and 80 ml cartridges applications use the squeeze-pipe and the multi-functional-nozzle for opening the membrane and the cap.
<b>Cleaning after application</b>	Uncured BETALINK K1 can be removed with BETACLEAN Spoiler. Cured BETALINK K1 can only be removed mechanically. Immerse tools in BETACLEAN Spoiler. Attention: Do not use BETACLEAN Spoiler for surface preparation.
<b>Shelf life</b>	6 month Cartridge and Sausages with storage at +5° C to +25° C in unopened containers 6 month Pails and Drums
<b>Protection measures</b>	See health and safety data sheet.

## Dow Automotive quality assurance

Quality is our utmost goal. Dow Automotive works according to a modern quality management system conforming to ISO/TS 16949:2002.

Environment: All sites of Dow Automotive are conforming to ISO 14001:2004.

All statements, technical information and recommendations contained in this document are based on tests that we believe are reliable.

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