



## Körapur 790 Enables Lightweight Tailgate Production in Bus Manufacturing

To save weight, bus manufacturers are increasingly resorting to light construction using composite materials. With our solution Körapur 790 we help bus manufacturers to achieve this goal while improving their production process and reducing their costs.

In the past, tailgates of busses were made of aluminium or metal parts, welded together. With the use of composite materials, welding is no longer an option these days. Tailgates are usually produced out of aluminium cover sheets, reinforced with honeycomb and closed with GRP on the inside. This combination of different material types requires high performance adhesives for an efficient, safe and durable assembly.

The competitor's adhesive that our customer was working with did not meet the requirements for the assembly of the tailgates. Adhesion problems on powder coated panels occurred which caused quality claims in the production process.

For these reasons the customer was looking for alternative bonding solutions for this application.

Based on the requirements and in close cooperation with the customer we developed a tailor-made solution to solve customer's

challenges. We competed with other adhesive suppliers to provide the requested solution. Finally we recommended Körapur 790/15, a 2-K polyurethane adhesive with high mechanical properties. The 1:1 ratio allowed the customer to use his existing mixing and dosing equipment. The biggest challenge was the open time because manual spreading of the adhesive was needed. Based on the analysis of the process, we offered a product with a 15 min pot life, which ensured an optimal working cycle. After all the tests and analyses performed this was finally the decisive point against the competitor's offers.

During the test stage and changeover, our team assisted at any time and during every single step of the new process.

By choosing our solution, the customer optimized the production process and eliminated the quality issues they were facing before.

# Product Performance

## Körapur 790/15 Polyurethane Adhesive

Körapur 790/15 is a solvent free 2-K polyurethane adhesive with high mechanical properties for flexible use in various applications. Resin and hardener are mixed in a 1:1 ratio by volume which results in a non-sagging and paste structural adhesive. Depending on the requirements, Körapur 790 is available with different potlives.

Product	Color	Mix ratio (by volume)	Pot life (min)	Elongation at Break (%)	Tensile Strength (MPa)	Lap Shear Strength (MPa)	Hardness Shore D	Service Temperature (°C)
Körapur 790/15	Beige	1:1	15	35	14	18	74	-160 to +90 short-term +120

### Summary of Customer's Results:

- Improved Production Process
- Optimised Cycling Times
- Higher quality
- Eliminated claims

Ask H.B. Fuller today about how we can help to improve your production process with our innovative bonding solutions.



### About H.B. Fuller

Since 1887, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products to improve products and lives. H.B. Fuller's commitment to innovation brings together people, products and processes that answer and solve some of the world's biggest challenges. Our reliable, responsive service creates lasting, rewarding connections with customers in electronics, disposable hygiene, medical, transportation, aerospace, clean energy, packaging, construction, woodworking, general industries and other consumer businesses. And, our promise to our people connects them with opportunities to innovate and thrive. For more information, visit us at [hbfuller.com](http://hbfuller.com).



For more information about our company, visit [www.hbfuller.com](http://www.hbfuller.com) or [www.koe-chemie.com](http://www.koe-chemie.com).

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