



Spectacular and innovative: The Aerothan tube introduces a new era in tube technology, entirely without rubber!
Photos: Schwalbe

Outstandingly light-weight, extremely robust:

The tube revolution made of Aerothan

Schwalbe's revolutionary new tube made of Aerothan achieves top values for elasticity, weight and puncture protection never seen before – and all that without rubber. For road bikes, mountain bikes and trekking bikes.

100 grams less weight on a road bike, puncture protection for extreme touring cyclists and air pressures around one bar on a mountain bike with no increased risk of pinch flats: What seemed impossible has now become reality with the new thermoplastic polyurethane called Aerothan. With the Aerothan tube, cyclists and long-distance riders may push their limits even further than before. Aerothan tubes are much more robust and durable than butyl, latex and other synthetic tubes.

The transparent tube starts at a mere 41 grams and is truly innovative: "For five years, we have tested the material in cooperation with BASF and improved it to perfection, exploring a completely new area of technology. This was the only way to surpass apparent obstacles of wanting to combine minimal weight and greatest puncture protection," says Felix Schäfermeier, Schwalbe Product Manager. "The result has exceeded our expectations!" The material, a thermoplastic polyurethane, has incredible

physical characteristics: a high level of resilience, unique ultimate tensile strength, superior damping properties, extreme heat resistance and greatest wear-resistance. Of course, it is also recyclable.

Aerothan tube: New standards for light weight and puncture protection

Comparative tests show how impressively these characteristics act together in the Aerothan tube and how they compare to other tubes. The plunger test simulates a small object puncturing, for example a glass, flints and metal shard. This is exactly the cause of many flats. Here, Aerothan lasts twice as long as other materials: a force of 47 newtons is needed to puncture an Aerothan tube – more than double compared to other materials. Schwalbe's new tube also performs best in the snake bite test using a guillotine with much greater falling heights than butyl, latex and other synthetic tubes. Unrivalled also for its heat resistance: this property was tested at temperatures of more than 150°C at 78 km/h using a specially developed procedure.

Aerothan scores high points for low weights of 41 grams for road bike tubes, 61 grams for all-round purposes and 81 grams for mountain biking. Test results for its rolling resistance keep up well with latex, traditionally fastest tube material and with tubeless systems.

The exceptional shape stability of this material provides additional advantages. Aerothan tubes do not suddenly go flat. In case of a defect, air escapes only very slowly. Even at extremely low air pressure, it retains its shape and thus stays rideable in a stable manner – pinch flats or burping becomes much less of a threat. In addition, mounting is much easier. The tube does not slide away and cannot get caught.

Riding properties beyond comparison:

“Despite its high surface tension, resilience is excellent and offers a smooth, dynamic and precise ride which I have never experienced before,” says Felix Schäfermeier who is also a former pro rider. This tube connects so smoothly and form-fitting with the tire as if it were a part of it.

Like all Schwalbe products, the new tube did not only emerge from the lab, but it also came to perfection thanks to thousands of test rides. Pros on the road, triathletes, World Cup mountain bikers and cyclists riding around the globe provided valuable feedback to the developers.

Including Patrick Lange, Ironman Hawaii World Champion 2017 and 2018. His conclusion: “Aerothan is my first choice. Firstly, because 100

grams can be saved per set of tires compared to conventional tubes.
Secondly, because I really enjoy the low rolling resistance. Especially during acceleration, I can really feel the difference to the maximum.”

This press release including photo(s) is available for download at: <http://presse.schwalbe.de>

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