



## TIRES

Safety, efficiency, comfort and precise handling characteristics – these are the primary qualities of the tires that Audi develops for its cars and installs in the factory. This holds true for every model for tires ranging from 15 to over 20 inches in the diagonal and from just under 200 millimeters (7.87 in) to over 300 millimeters (11.81 in) in width.

At Audi, sportiness and safety are inseparable. This translates to highly precise steering in both dry and wet conditions, cornering stability, firm grip, short braking distances under all circumstances, superior endurance over long high-speed stretches and a long lifetime. Comfort means that the tire provides resilient cushioning to smooth out small irregularities in the road's surface, runs quietly and prevents undesirable vibrations from being transferred to the car. To ensure these qualities, Audi begins working closely with competent tire suppliers while its vehicles are still in the development stages.

Together with these suppliers, Audi is also making advances in the field of efficiency. Tires consume significant amounts of energy, and their rolling resistance is the culprit for this. Rolling resistance arises due to the fact that as the tires turn, they flex; in other words, they undergo a process of continuous deformation. At 120 km/h (74.56 mph), their total energy consumption is approximately 4 kilowatts, equivalent to about 1 liter of fuel per 100 kilometers or CO<sub>2</sub> emissions of around 25 grams per kilometer (40.23 g/mile).\*\* New developments in tire construction and rubber blends significantly lower rolling resistance without compromising dynamics or safety.

Much development work is directed at achieving these objectives. This work entails testing or verifying over 60 different properties and requirements per tire – even more for winter tires, all-season tires and tires for SUVs. If a tire is deemed to be good for an Audi and is approved (as is the case for approximately one in five tires tested), it receives the “AO” designation, making it identifiable as an Audi Genuine Part.

\*\*Figures depend on the tires/wheels used.

Status: 2011