ExxonMobil

Better tire performance starts with optimal air retention

Maintaining optimal tire air pressure results in several benefits*

Enhanced in-use efficiency

1-2% decrease in fuel consumption

Improved safety and longer life

7% decrease in braking distance

8% increase in tire life

Improved environmental impact

8 million
tons of CO2 saved per year

Significant savings

4 billion
liters of fuel saved per year.

Optimally designed tire inner liners deliver consistent performance, efficiency and reduced maintenance.
Available and proven halobutyl technology makes it possible to reduce fuel consumption and carbon emissions — all while optimizing air retention.

The challenge

Average air pressure loss is 2.4% per month

The solution

Inner liners that improve air-barrier performance

Why do we need a maximum standard for inflation pressure loss rate (IPLR)?

- Almost 80% of the vehicles in the EU run on under inflated tires †
- Performance ratings under the Tire labeling standards are only conducted on fully inflated tires, which don't reflect realistic conditions

* Fuel savings and CO2 reductions are global. Use phase only.
† Source: http://www.ETRMA.org/2014report

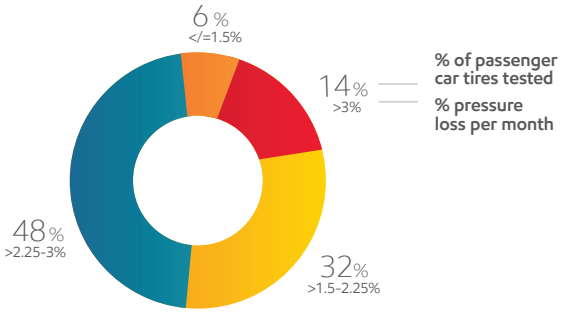
Strength. From the inside out.

When the rubber meets the road, it's what's on the inside that counts.

Establishing a maximum standard for inflation pressure loss rate (IPLR) will ensure consistently reduced fuel consumption and carbon emissions. IPLR, which measures the percentage of air pressure loss per month, varies widely depending on the composition and gauge of tire inner liners. The industry already has the capability to respond to improved air retention performance standards:

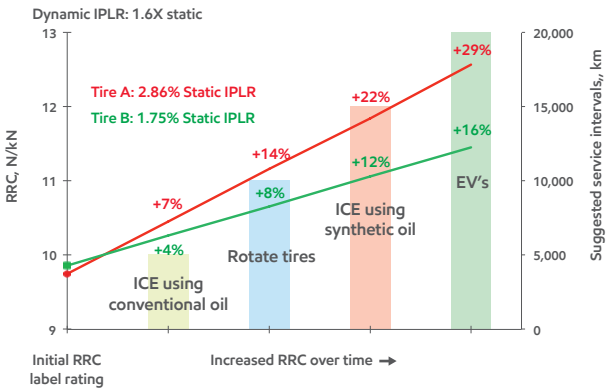
- **Recognized ASTM/VDA standard exists**
- **Two OEMs (GM, FCA) already specify IPLR standards**
- **Tire inflation pressure impacts in-use rolling resistance (RR) efficiency**
- **In-use efficiency and performance can differ greatly from the label value**
- **Fuel efficiency improvements can be lost in weeks due to tire deflation**

IPLR measures % air pressure loss per month and varies widely



Based on >300 passenger car tires purchased globally and tested per ASTM F1112 (Static)

Importance of improved air retention increases with extended service intervals



Every 10% increase in RRC reduces ICE efficiency by 1-2%*, 4X greater in EV's**

*www.epa.org; **www.fueleconomy.gov "Where the Energy Goes"