



Nitrogen for Tires



Choosing between compressed air or compressed nitrogen for your tires?

**really... you choose
OK!**



Simple Compressed Air



Compressed Nitrogen

What's the Difference Between Compressed Nitrogen and Compressed Air?

93% - 99.9% Nitrogen
6% - 0.1% Other Gases

78% Nitrogen
21% Oxygen
1% Other Gases



What Are the Claimed Benefits?

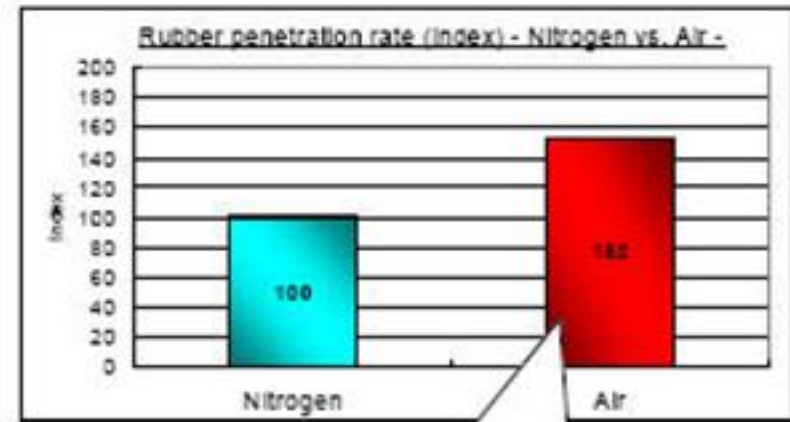
1. **Slower inflation pressure loss**
2. **Reduced wheel corrosion**
3. **Prevents inner rubber deterioration by oxidation**
4. **Tires run cooler**
5. **Increases tread life**
6. **Increases fuel mileage**



Do Both Nitrogen and Oxygen Permeate Rubber?



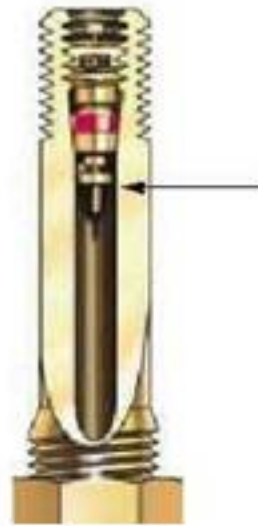
**Compressed Air
1 Psi in a month**



Air migrates easier through rubber than nitrogen gas.

**Compressed Nitrogen
2 Psi in six months**

Does Nitrogen Prevents Corrosion?



With corrosion, small particles break off and form rust and dust which can clog valve cores causing leaks and preventing bead seal.

Does Oxygen Reacts with Rubber Through Oxidation?



Oxygen may age the inner layer of rubber inside the tire. As the inner layer ages, more and more air molecules may pass through, causing pressure losses.

Proper Inflation the Most Important Factor?



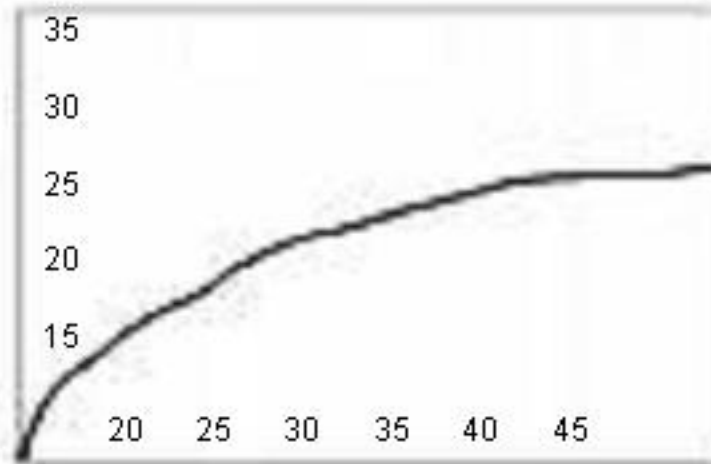
4. Tires run cooler
5. Prolongs tread life
6. Increases fuel mileage

ED FISCHER





MPG



Tire Pressure



Reduces Flex (Heat)

Increases Tread Life

10% Reduction RRC

Increases Fuel Economy 2%



"General Motors does not oppose the use of purified nitrogen as an inflation gas for tires. "



"When nitrogen is used as the inflation media, the change in rubber properties is significantly slowed down..."

TOYO

"Nitrogen bleeds through the inner liner or tube at a slower rate than regular compressed air."



"Michelin supports the use of Nitrogen, based on its ability to better retain gas volume over a period of time. "

GOODYEAR

"Goodyear supports the use of nitrogen, based on the ability of the tire to retain pressure for a longer period of time."



"Nitrogen reduces the risk of self ignition and tire burst, if tires are overheated."



"Nitrogen is slower to leak out through the casing than air and does not carry moisture that can lead to rust..."

