



SOLVAY

asking more from chemistry®



TIRE SOLUTIONS

**High performance
silica for tires**

Let's innovate for sustainable performance



Reducing rolling resistance

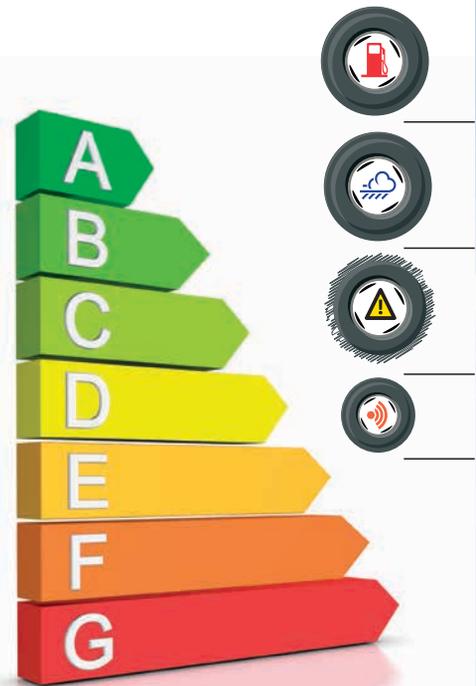
Car makers are striving to get their vehicles to use less energy and emit less CO₂ by streamlining chassis and bodywork, and developing hybrid engines and smart materials. They also recognize the critical roles tires play. But the rolling resistance of tires is responsible for 20 percent of fuel consumption, and it essential to reduce it.

Meeting regulatory demands

Places such as Japan, Europe, U.S., Korea and Brazil have enacted, or are in the process of developing, new regulations requiring labels for tires. These labeling requirements vary by country, but generally will give consumers information on safety performance, wet traction, durability, environmental performance, fuel consumption and external noise. Achieving these new required minimums, demands a technological change, which is now made possible by highly dispersible silica.

Overcoming challenges

Solvay helps its partners address challenges – the rising cost of raw materials, sharply increasing demand, new regulations, production rationalization – with innovative solutions that improve productivity.

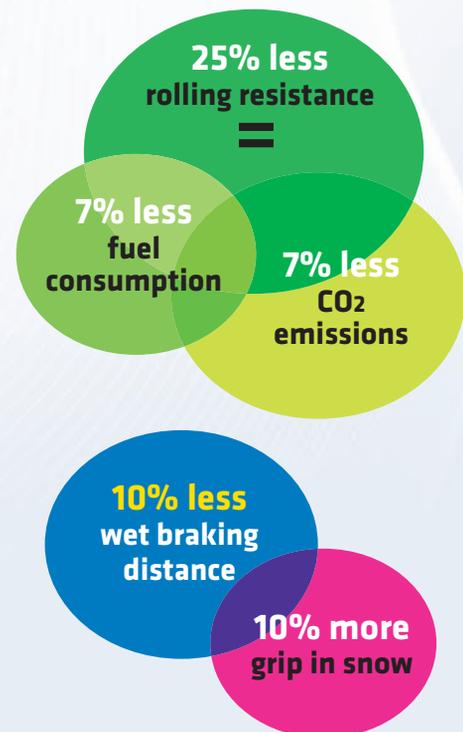


Solvay Silica Technology: innovation and technical solutions for sustainable mobility

Precipitated silica, an amorphous mineral substance, lies at the heart of Solvay silica technology. From its fabrication to its integration into your production process to its use in tires, precipitated silica presents a strong sustainability profile. It is classified as a harmless product under European and United States standards.

Multiple benefits in tires

Solvay Highly Dispersible Silica (HDS) reinforces tires by replacing carbon black in tire treads. Unlike conventional silica, it reduces rolling resistance and improves traction on wet surfaces without sacrificing wear.





The Solvay Silica range: customized high performance

Solvay, technology partner to tire makers

As the inventor of highly dispersible silica for green tires in the early 1990's, Solvay created a new industry standard and remains a pioneer today. We stand as the industry leader, supplying the world's top tire companies and capturing over 50 percent market share.

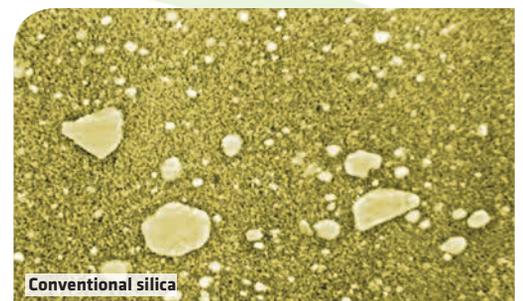
Leading innovation...

On the strength of 20 years of continuous innovation, Solvay today markets the widest range of silica, protected by a large number of patents on processes and applications. Zeosil® Premium, an advanced highly dispersible silica, reduces rolling resistance even further. Solvay research teams are constantly developing innovations to make tires safer, more eco-friendly and to make processes more efficient for tire manufacturers.



HDS: the Solvay technology for all types of tires

The Highly Dispersible Silica range enables optimal dispersion in rubber compounds and guarantees the best wear resistance as compared to conventional silica. This technology enables even ultra high performance tires and sports tires to be more fuel efficient with no concession to durability or performance handling.



Did you know?

The silica Zeosil® 1165MP is now the world benchmark for low rolling-resistance tires. Since the invention of its Zeosil® range, Solvay and its customers have helped reduce CO₂ emissions by more than 40 billion.

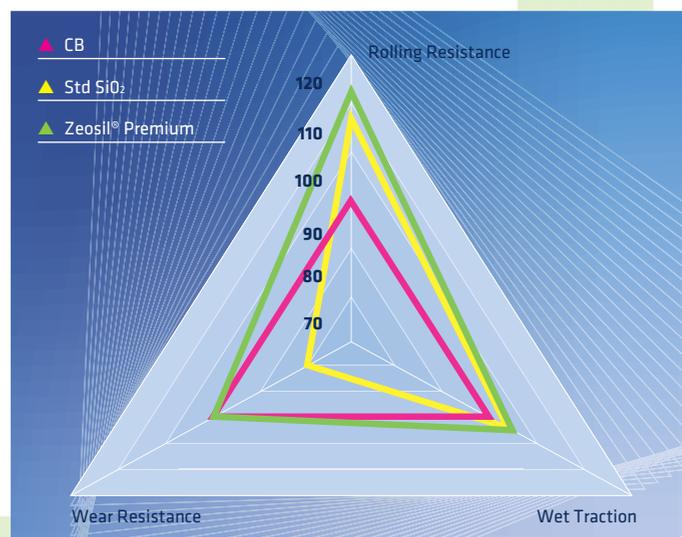


Zeosil® Premium: less resistance, more performance

Latest innovation from Solvay for the Tire industry, Zeosil® Premium is a new generation of high surface silica offering even less rolling resistance.

ZEOSIL® PREMIUM

Zeosil® Premium, up to 7 percent fuel savings
Zeosil® Premium, your passport for the A-A tire



Easy processing: don't compromise on productivity

A highly dispersible silica developed and patented by Solvay, Zeosil® Premium is a micropearl silica that is fluid, dense and dust free. This form allows:

- improved Health, Safety and Environment conditions
- easy handling from silos to formulation workshops
- automatic and accurate weighing
- improved behavior during mixing and extrusion (speed, aspect/profile)

Boost your productivity substantially, with Solvay's expertise.

And tomorrow...

Solvay's R&D teams are working on developing new solutions to:

- incorporate silica into all parts of the tire
 - extend silica technology to the heavy vehicle market
- ...and even greener processes for our production plants!



Solvay Silica worldwide

The power of the largest silica production network in the world...

With eight industrial sites around the globe, Solvay is the only worldwide manufacturer of highly dispersible silica with production capacities and uniform specifications in America, Europe and Asia to serve the growing global needs of its customers.

...and the confidence of having a partner near you

The size and local structure of our network allow us to listen and be reactive to your needs. With you on the ground, we can tailor our solutions to best meet your needs and support your sustainable mobility challenges.



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