

SILICONES & TRANSPORT

Did you know?



You may know silicones as the sealant in your bathroom. But did you know that silicones play a key role in cars, airplanes, trains and ships?

Most materials deteriorate in harsh and extreme conditions, but not silicones. They retain their properties and – most important – ensure that cars, ships, airplanes and trains operate safely and sustainably for the long haul.

A SELECTION OF APPLICATIONS



Airbags



Paints & coatings



Light weight doors



Rubber



ABS sensor & sealing



1.7 MILLION PEOPLE ACROSS EUROPE ARE EMPLOYED IN SECTORS THAT ARE RELATED TO SILICONE PRODUCTS.

Silicones are part of a bigger value chain that create jobs and enable a better quality of life for us.

A SNAPSHOT OF HOW SILICONES HELP IMPROVE OUR LIVES



CAR / AUTOMOTIVE MANUFACTURING

LOWER WEIGHT COMPONENTS

Reduced emissions

CO₂, NO_x, SO₂, known to cause adverse effects to human health & environment

Increased fuel efficiency

Savings in Europe €1400 million per year

You will find more information on the socio-economic contribution of silicones in our report available at silicones.eu



THEY REDUCE ENVIRONMENTAL IMPACT.

••• Silicones make an impressive contribution to reducing fuel consumption of cars and ships, significantly reducing the CO₂ footprint of the transport sector.¹

••• Over 86 tonnes of CO₂ is saved for every tonne of CO₂ emitted during the production of silicone rubber used to make motor parts.

••• Fuel savings outweigh CO₂ emissions from production of the silicone product 182 times.

THEY ENSURE SAFETY.

••• Highly durable, gas-tight fabrics are crucial to the performance of airbags, which is why these are coated with silicone on the inside.

••• Silicones are extremely resilient and can ensure the airbag is gas-tight and heat resistant under the pressure from rapid inflation and other extreme conditions, such as fire.

1 - GSC Carbon Balance Study, 2012

THEY INCREASE FUEL EFFICIENCY.

••• Silicones improve fuel efficiency for ships and boats as they dramatically reduce the build-up of dirt and film on the hull.

••• Silicones insulate electronic parts, reduce tire rolling resistance, bond lightweight materials together and seal windows and doors reducing friction and fuel consumption.

By using products made with silicones, you generate on average
9 TIMES LESS GREENHOUSE GASES *than were emitted during manufacturing and disposal of that product.*



PUT SIMPLY, SILICONES MAKE THINGS WORK BETTER!

WANT TO KNOW MORE?

This is just a snapshot of some of the applications in which silicones are used. For more information on silicones in other transport applications, the following website will help you find what you need:

WWW.SILICONES.EU

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This factsheet is one of a series developed by silicone producers in Europe to highlight some interesting and surprising facts about the use of these innovative materials and how they contribute to Europe's goals of smart, sustainable and inclusive growth.