

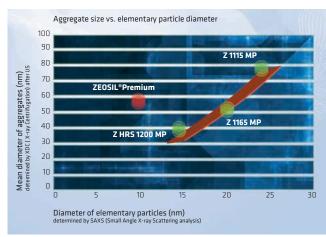


The new High Surface Silica technology for Tires

Cutting edge technology with unique morphology

Zeosil® Premium is the first generation of high surface silicas which combines high dispersibility, excellent reinforcement and low hysteretic properties.

Zeosil® Premium offers unique structure, resulting from a new compromise between silica aggregate and elementary particle sizes (Specific Surface Area).



Zeosil® Premium: less resistance, more performance

Reduction in rolling resistance for unmatched environmental benefits

This technology delivers further reduction in rolling resistance thereby lowering fuel consumption and impact on the environment.



Improvement of handling for better driving behavior

The excellent dispersibility of Zeosil® Premium provides tire users with better handling characteristics and longer tread life.



 Enhancement of processing performance for increased productivity

The unique premium morphology improves mixing and processing performance increasing tire manufacturer productivity.





TIRE SOLUTIONS

Let's innovate for sustainable performance



Solvay Silica ranges for tires: the world class reference for energy efficient tires

Highly Dispersible Silica Micropearl

Launched by Solvay, the Highly Dispersible Silica has become the universal benchmark allowing low rolling resistance while maintening wear resistance and grip properties.



The new high surface silica technology

Zeosil® 1200MP

Zeosil® 1165MP

Zeosil® 1115MP



Zeosil® 195HR

Zeosil® 165GR

Zeosil® 115GR

Zeosil® 1085GR

Conventional Silica Granule

Tire applications can also benefit from the expertise of conventional silica.

Zeosil® 195GR

Zeosil® 185GR

Zeosil® 175GR

Zeosil® 125GR



SPORT TIRES





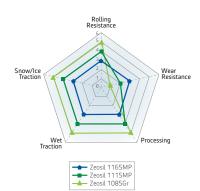


Solvay Highly Dispersible Silica: the widest performing range of HDS for sustainable mobility and energy efficient tires

| | HIGHLY DISPERSIBLE SILICA | | | | |
|-------------------------|----------------------------|------------------|-----------------------------------|-----------------|--------------|
| Name | Zeosil®1085Gr | Zeosil®1115MP | Zeosil®1165MP | Zeosil® Premium | ZHRS® 1200MP |
| Characteristics | Amorphous precipitated | | | | |
| Aspect | White Micro-Granu- late | White Micropearl | | | |
| Manufacturing location | France | South Korea | EU: Fr, It USA Asia: SK, Cn | France | Italy |
| TYPICAL ANALYSIS* | | | | | |
| CTAB (m²/g) | 80 | 110 | 160 | 200 | 195 |
| BET (m ² /g) | 90 | 115 | 165 | 215 | 200 |
| Processing | 5 | 4 | 3 | 2 | 1 |
| Rolling Resistance | 5 | 4 | 3 | 4 | 2 |
| Handling | 1 | 2 | 3 | 4 | 5 |
| Wear Performance | 1 | 2 | 3 | 5 | 4 |
| Dry Grip | 1 | 2 | 3 | 3 | 3 |
| Wet Grip | 5 | 4 | 3 | 2 | 2 |
| Ice/Snow grip | 5 | 4 | 3 | 1 | 2 |

Satisfactory
Cood
Very Good
Excellent
Premium

Tire Range



Rolling Resistance

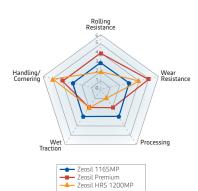
Processing

Resistance

Second 1 165MP

Zeosil 1 165MP

Zeosil Premium



Example of associated

Tires with high wet/ snow/ice grip ex : Winter Tire Suitable for non tread application (all tires)

Fuel Efficient Tires Asia standards OE + (RT) Fuel Efficient Tires West EU and USA standards OE + (RT)

New Generation Fuel Efficient Tires (EU/labelling)

UHP Tires Sport Tires

Most products are available in different package size (paper bag, big bags, bulk). For more informations including product specification, visit us at **www.solvay.com**

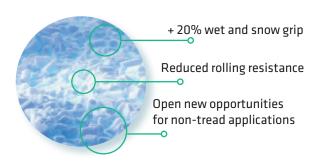


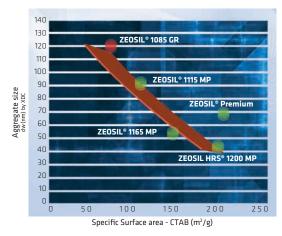
TIRE SOLUTIONS

Let's innovate for sustainable performance



Zeosil® 1085GR





Zeosil® 1085GR is the only very low surface area Highly Dispersible Silica (HDS) available on the market that suits tire industry needs.

Solvay Silica developed this new solution to improve wet and snow grip by 20% while sharply reducing rolling resistance and therefore improving fuel efficiency.

These advantages bring new opportunities to meet tire labelling regulations and winter tire laws imposing the use of winter tires from fall to spring.

Designed to enhance Winter and Nordic tire performances, Zeosil® 1085GR also brings new opportunities to other applications (non tread and rubber goods for example).

Its microgranulate form has a specific shape designed to combine low dusting, excellent flowability and optimum dispersion. Zeosil® 1085Gr can be handled in both standard and pneumatic conveying systems.

Zeosil® 1085GR: Less resistance, more safety, more applications

Winter tires: Zeosil® 1085GR offers great improvements in ice, snow and wet traction together with reduced rolling resistance.

Using this innovative silica improves safety of drivers in difficult driving conditions while enabling tire manufacturers to be in conformity with the European labelling program.



Non-tread applications: Zeosil® 1085GR can also be used in other parts of the tire like sidewalls or bead.

This silica reduces the compound hysteresis and the heat build-up while maintaining stiffness and diminishing fatigue failure. It is the solution of choice for further reducing of rolling resistance of all tires without affecting tire lifetime.



Processing: The very low surface area silica developed by Solvay makes this Highly Dispersible Silica the easiest to process.

This technology offers many possibilities to enlarge silica usage in difficult processing conditions (high silica loading, high viscosity matrixes...).



Solvay Silica

WW Headquarters 190, avenue Thiers 69006 Lyon France

Solvay Silica

NA Headquarters 8 Cedar Brook Drive Cranbury NJ 08512 USA

Solvay Silica

Latam Headquarters Av. Maria Coelho de Aguiar, 215 Bloco B 05804-902 São Paulo - Brazil

Solvay Silica

Asia Headquarters 3966 Jin Du RD, Xin Zhuang Industrial 201108 Shanghai - China

