

WOSIL™ 300

SiO₂, synthetically produced amorphous silicon dioxide. Due to the low specific BET surface area of approximately 120 m²/g, the highly dispersible **WOSIL® 300** combines excellent hysteresis performance and high reinforcement with improved processing behavior in passenger car tire tread compounds. This silica is especially suited to high filler loadings for the optimization of wet and winter properties.

CAS-No. 112926-00-8

Typical Properties

<u>Properties</u>	<u>Unit</u>	<u>Values</u>
Specific surface area (N ₂) Multipoint following ISO 9277	m ² /g	115
Specific surface area (CTAB) following ISO 5794-1G	m ² /g	110
Loss on drying 2 h at 105°C following ISO 787-2	%	5.5
pH value 5 % in water following ISO 787-9	-	6.5
Pour density following ASTM D1513	g/l	280
SA Ro-Tap (> 300 µm) following ISO 5794-1F	%	≥ 80
SA Ro-Tap (< 75 µm) following ISO 5794-1F	%	≤ 10
Electrical conductivity 4 % in water following ISO 787-14	µS/cm	≤ 1000
SiO ₂ content ¹⁾ following ISO 3262-19	%	≥ 97
Package size paper bag (net)	Kg	25
Package size FIBC (net)	kg	650

1) Based on ignited substance (2 h/1000°C)

*) The given data are typical values. Specifications on request.

Applications

WOSIL® 300 is a mechanically compacted granulate. On account of the granulation process it leads to less dust development during mixing. Compared to standard silicas with a specific surface area of approximately 160 m²/g **WOSIL® 300** provides lower compound viscosities, i.e. an improved processing behavior at equal loading. Furthermore, lower dynamic stiffness at low ambient temperatures and improved rolling resistance are achieved for tire tread compounds. Higher silica loadings will improve wet traction properties and allow to optimize winter properties. Application fields are: Tires, mechanical rubber goods.

Bifunctional organosilanes like Si 69®, Si 75®, Si 266® or VP Si 363® are required for the use of **WOSIL® 300** in tire tread compounds. The use of diethylene glycol, triethanolamine or other alkaline accelerators might be necessary in order to achieve optimum in-rubber data.

Packaging, Storage & Handling

Our silica products are inert and extremely stable chemically. We recommend storing the products in sealed containers in a dry, cool place, and removed from volatile organic substances. Recommended use-by date is 24 months after date of manufacture. Product more than 24 months old should be tested for moisture content before use in order to make certain that it is still suitable for the intended application.

Application and Dosage

Information concerning the safety of this product is listed in the corresponding Safety Data Sheet, which will be sent with the first delivery or upon updating.