

# Precipitated Silica for the Rubber Industry



# PRECIPITATED SILICA

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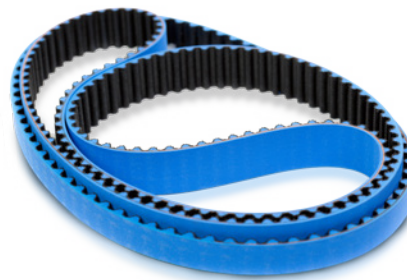
TYPICAL VALUES						
PROPERTY	BET SURFACE AREA (N <sub>2</sub> )	CTAB SURFACE AREA	ELECTRICAL CONDUCTIVITY	LOSS ON DRYING 2h, 105 °C	pH VALUE	
UNIT	m <sup>2</sup> /g	m <sup>2</sup> /g	μS/cm	%	-	
TEST METHOD (GUIDANCE)	ISO 9277	ISO 5794-1 G	ISO 787-14	ISO 787-2	ISO 787-9	
<b>Highly dispersible silica</b>	ULTRASIL® 9100 GR	235	200	≤ 1300	5.5	6.5
	ULTRASIL® 7005*	190		≤ 1300	≤ 7	6.0
	ULTRASIL® 7000 GR	175	160	≤ 1300	5.5	6.5
	ULTRASIL® 5000 GR*	115	110	≤ 1000	5.5	6.5
<b>Standard silica</b>	ULTRASIL® VN 3	180		≤ 1300	5.5	6.2
	ULTRASIL® VN 3 GR	180	165	≤ 1300	5.5	6.2
	ULTRASIL® VN 2	130		≤ 1000	5.5	6.9
	ULTRASIL® VN 2 GR	130	125	≤ 1000	5.5	6.9
	ULTRASIL® 360	55		≤ 1200	5.5	9.0
<b>with calcium silicate</b>	ULTRASIL® 880	35			5.5	10.5
<b>Sodium aluminium silicate</b>	ULTRASIL® AS 7	65			5.5	11.3

\*limited regional availability



In recent years silica has become an important raw material for the rubber and tire industry. Evonik is one of the global market leaders in precipitated silica business with ten production plants and regional sales offices and technical service around the world.

The high purity precipitated silica offered by Evonik used as reinforcing filler for the rubber industry is globally sold under the trade name ULTRASIL®. The ULTRASIL® line offers a broad range of particle sizes and performance benefits to suit the specific needs of our customers. Evonik is the only supplier to offer Silica/Silane systems to the rubber industry. This reinforcing filler system is predominantly used in low-rolling resistance tires with excellent wet grip, but also in mechanical rubber goods and shoe soles which require enhanced performance. Our application engineers and technicians are always available to answer any questions you may have, so don't hesitate to call. On request, we will gladly send detailed information on individual products, product samples as well as technical essays on application issues relevant to your processes.



SIEVE RESIDUE (MOCKER) 45 µm	SIEVE RESIDUE (MOCKER) 63 µm	GRANULAR SIZE (RO-TAP) > 300 µm	GRANULAR SIZE (RO-TAP) < 75 µm	POUR DENSITY g/l	TAMPED DENSITY g/l
%	%	%	%		
ISO 787-18	ISO 787-18	ISO 5794-1F	ISO 5794-1F	ASTM D 1513	ISO 787-11
		≥ 80	≤ 10	250	250
		≥ 80	≤ 10	260	
		≥ 80	≤ 10	270	
	≤ 0.05				160
		≥ 80	≤ 10	280	
	≤ 0.10				
≤ 0.30		≥ 80	≤ 10	260	180
≤ 0.15					260
≤ 0.50					220

# The advantage of a Global Enterprise – Local Proximity

## Precipitated Silica production sites:



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