

TDS-Technical Data Sheet

PRECIPITATED SILICA

Production information

Grade: NEWSIL 175

1. General description

. Precipitated silica for use as a white reinforcing filler in the rubber industry.

2. Chemical description

SiO₂, synthetically produced amorphous silicon dioxide

3. Application

NEWSIL 175 possesses a high reinforcing potential and imparts to rubber compounds particularly high Shore hardness, tensile strength, tear resistance and abrasion resistance. In order to achieve optimum rubber-technical data the addition of activators like glycols, amines or other alkaline accelerators is necessary. On account of the higher surface area NEWSIL175 in combination with the appropriate compound ingredients, yields vulcanizes of excellent transparency.

Application fields:

Tires, mechanical rubber goods, cables and shoe soles of all kinds.

4. Specification

Item	Unit	Specification
SiO ₂ On dried sample	%	≥98
specific surface area BET	m ² /g	165-185
Drying loss 2h at 105°C	%	4.0-8.0
Ignition loss 2h at 1000°C	%	4.0-7.0
PH value 10% aqueous solution		6.0-7.5
DBP absorption value	cm ³ /g	2.00-3.50
Sieve residue on 325 mesh	%	≤0.5
Cu	mg/kg	≤6
Fe	mg/kg	≤1000
Mn	mg/kg	≤6
Na ₂ SO ₄	%	≤1.60

5. Storage stability:

NEWSIL 175	24 months
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To ensure that product properties and application behavior remain unchanged, our precipitated silica ought to be stored in closed and dry premises protected against exposure to volatile substances. Strict observance of optimum storage conditions ensures prolonged usability, nevertheless we recommend not to exceed a storage period of approximately two years.

6. Product safety

Information concerning the safety of this product is listed in the corresponding Safety Data Sheet.