

TDS-Technical Data Sheet

PRECIPITATED SILICA

Production information

Grade: NEWSIL 135GR

1. General description

Precipitated silica for use as a white reinforcing filler in the rubber industry. NEWSIL 135GR is a mechanically compacted granulate. On account of the granulation process it leads to less dust development during mixing and has a higher tapped density than powder material.

2. Chemical description

SiO₂, synthetically produced amorphous silicon dioxide

3. Application

NEWSIL 135GR 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 NEWSIL 135GR in combination with the appropriate compound ingredients, yields vulcanizates 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	125-145
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		6.5-7.5
DBP absorption value	cm ³ /g	2.00-3.00
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
Bulk Density	g/l	≥280

5. Storage stability:

NEWSIL 135GR	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.