

TDS-Technical Data Sheet

PRECIPITATED SILICA

Production information

Grade: NEWSIL 155 FFG

1. General description

Precipitated silica for use as a white reinforcing filler in the rubber industry. NEWSIL 155 FFG is a mechanically compacted free flowing granule. On account of the granulation process it leads to less dust development during mixing and has a higher dispersion than common silica.

2. Chemical description

SiO₂, synthetically produced amorphous silicon dioxide

3. Application

NEWSIL 155 FFG 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 155 FFG 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	140-165
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 /100g	200-350
Particle size	um	250-330
Cu	mg/kg	≤30
Fe	mg/kg	≤1000
Mn	mg/kg	≤50
Na ₂ SO ₄	%	≤1.60
Bulk Density	g/l	160-260

5. Storage stability:

NEWSIL 155 FFG	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.