

## TDS-Technical Data Sheet

### PRECIPITATED SILICA

#### Production information

Grade: NEWSIL 155GR

##### 1. General description

Precipitated silica for use as a white reinforcing filler in the rubber industry. NEWSIL 155GR 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

SiO<sub>2</sub>, synthetically produced amorphous silicon dioxide

##### 3. Application

NEWSIL 155GR 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 155GR 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 <sub>2</sub> On dried sample | %                  | ≥98           |
| specific surface area BET        | m <sup>2</sup> /g  | 140-160       |
| 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 <sup>3</sup> /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 <sub>2</sub> SO <sub>4</sub>  | %                  | ≤1.60         |
| Bulk Density                     | g/l                | ≥280          |

##### 5. Storage stability:

|              |           |
|--------------|-----------|
| NEWSIL 155GR | 24 months |
|--------------|-----------|

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.