

TECHNICAL DATA SHEET

DOC TDS-WS5 · REV. 06-2026 · ORIGIN EGYPT

# WS5

UNCOATED · GCC

Uncoated Natural Ground Calcium Carbonate

**DESCRIPTION** Natural, very fine ground calcium carbonate produced from high-purity, very white limestone using high-technology classifying mills. Not for pharmaceutical or medicinal use.

**APPLICATIONS**

Paper

Powder coatings (glossy finish)

Water - & solvent-based paints

Protective paints

Printing inks

Adhesives & sealants

MEDIAN  $d_{50}$

**1.5**  $\mu\text{m}$

TOP CUT  $d_{97}$

**5**  $\mu\text{m}$

FINES  $\leq 2 \mu\text{m}$

**70** %

BRIGHTNESS R(Y)

**96.5** % min

**CHEMICAL ANALYSIS**

|                                |                |
|--------------------------------|----------------|
| CaCO <sub>3</sub>              | $\geq 99.60$ % |
| MgO                            | $\leq 0.1$ %   |
| Fe <sub>2</sub> O <sub>3</sub> | $\leq 0.01$ %  |
| Al <sub>2</sub> O <sub>3</sub> | $\leq 0.05$ %  |
| SiO <sub>2</sub>               | $\leq 0.02$ %  |
| CaO                            | $\geq 55.67$ % |
| L.O.I.                         | <b>44.23</b> % |

**RAW MATERIAL**

|                       |                              |
|-----------------------|------------------------------|
| True specific gravity | <b>2.73 g/cm<sup>3</sup></b> |
| Hardness (Mohs)       | <b>3</b>                     |
| HCl insoluble         | $\leq 0.3$ %                 |
| Refractive index      | <b>1.59</b>                  |

**PHYSICAL**

|                |                              |
|----------------|------------------------------|
| pH (ISO 787-9) | <b>9 max</b>                 |
| Oil absorption | <b>23 g/100g</b>             |
| Bulk density   | <b>0.45 g/cm<sup>3</sup></b> |
| Moisture       | $\leq 0.2$ %                 |

**OPTICAL · BRIGHTNESS**

|              |               |
|--------------|---------------|
| R(Y) · C/2°  | $\geq 96.5$ % |
| L* · D65/10° | $\geq 98$     |
| a* · D65/10° | $\leq 0.2$    |
| b* · D65/10° | $\leq 1.2$    |

Datascolor Elrepho spectrophotometer

**PARTICLE SIZE DISTRIBUTION**

|                                     |                                             |
|-------------------------------------|---------------------------------------------|
| $d_{97}$                            | <b>5 <math>\mu\text{m} \pm 0.2</math></b>   |
| $d_{50}$                            | <b>1.5 <math>\mu\text{m} \pm 0.2</math></b> |
| Passing $\leq 2 \mu\text{m}$        | <b>70 % <math>\pm 2</math></b>              |
| Sieve residue $\geq 45 \mu\text{m}$ | <b>0.01 %</b>                               |

