

TECHNICAL DATA SHEET

DOC TDS-WS20 · REV. 06-2026 · ORIGIN EGYPT

# WS20

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**

Powder coatings (glossy finish)

Water- & solvent-based paints

Protective paints

Printing inks

Adhesives & sealants

MEDIAN  $d_{50}$

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

TOP CUT  $d_{97}$

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

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

**25** %

BRIGHTNESS  $R(Y)$

**96** % min

**CHEMICAL ANALYSIS**

|                         |                |
|-------------------------|----------------|
| $\text{CaCO}_3$         | $\geq 99.60$ % |
| MgO                     | $\leq 0.1$ %   |
| $\text{Fe}_2\text{O}_3$ | $\leq 0.01$ %  |
| $\text{Al}_2\text{O}_3$ | $\leq 0.05$ %  |
| $\text{SiO}_2$          | $\leq 0.02$ %  |
| CaO                     | $\geq 55.67$ % |
| L.O.I.                  | 44.23 %        |

**RAW MATERIAL**

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

**PHYSICAL**

|                |                        |
|----------------|------------------------|
| pH (ISO 787-9) | 9 max                  |
| Oil absorption | 17.5 g/100g            |
| Bulk density   | 0.73 g/cm <sup>3</sup> |
| Moisture       | $\leq 0.2$ %           |

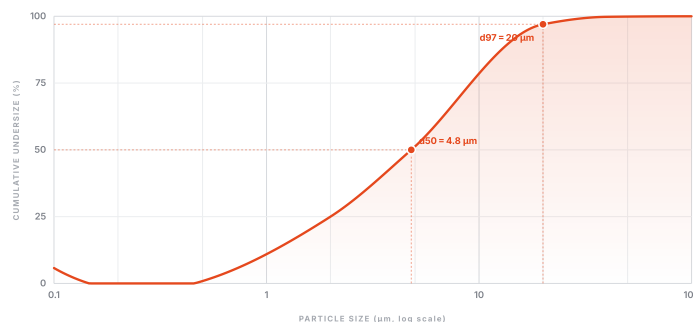
**OPTICAL · BRIGHTNESS**

|                             |             |
|-----------------------------|-------------|
| $R(Y) \cdot C/2^\circ$      | $\geq 96$ % |
| $L^* \cdot D_{65/10^\circ}$ | $\geq 97.5$ |
| $a^* \cdot D_{65/10^\circ}$ | $\leq 0.2$  |
| $b^* \cdot D_{65/10^\circ}$ | $\leq 1.2$  |

Datascolor Elrepho spectrophotometer

**PARTICLE SIZE DISTRIBUTION**

|                                     |                           |
|-------------------------------------|---------------------------|
| $d_{97}$                            | 20 $\mu\text{m} \pm 0.2$  |
| $d_{50}$                            | 4.8 $\mu\text{m} \pm 0.2$ |
| Passing $\leq 2 \mu\text{m}$        | 25 % $\pm 2$              |
| Sieve residue $\geq 45 \mu\text{m}$ | 0.05 %                    |



Cumulative undersize · Malvern Mastersizer 3000 (laser diffraction)