

TECHNICAL DATA SHEET

DOC TDS-WS5T · REV. 06-2026 · ORIGIN EGYPT

WS5T

SURFACE-COATED · GCC

Surface-Coated Ground Calcium Carbonate

DESCRIPTION Surface-treated (stearic-acid coated), very fine ground calcium carbonate produced from high-purity, very white limestone using high-technology classifying mills. Not for pharmaceutical or medicinal use.

APPLICATIONS

Rigid PVC pipe & profiles

Masterbatch

Cable compounds

Flexible PVC

Filled polyolefins

MEDIAN d_{50}

1.5 μm

TOP CUT d_{97}

5 μm

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

70 %

BRIGHTNESS $R(Y)$

96.5 % min

CHEMICAL ANALYSIS

CaCO_3	≥ 99.60 %
MgO	≤ 0.1 %
Fe_2O_3	≤ 0.01 %
Al_2O_3	≤ 0.05 %
SiO_2	≤ 0.02 %
CaO	≥ 55.67 %
L.O.I.	44.23 %

RAW MATERIAL

True specific gravity	2.73 g/cm^3
Hardness (Mohs)	3
HCl insoluble	≤ 0.3 %
Refractive index	1.59

PHYSICAL

pH (ISO 787-9)	9 max
Oil absorption	23 $\text{g}/100\text{g}$
Bulk density	0.45 g/cm^3
Moisture	≤ 0.2 %
Stearic-acid coating	14 – 14.5 kg/t

OPTICAL · BRIGHTNESS

$R(Y) \cdot C/2^\circ$	≥ 96.5 %
$L^* \cdot D_{65/10^\circ}$	≥ 98
$a^* \cdot D_{65/10^\circ}$	≤ 0.2
$b^* \cdot D_{65/10^\circ}$	≤ 1.2

Datascolor Elrepho spectrophotometer

PARTICLE SIZE DISTRIBUTION

d_{97}	5 $\mu\text{m} \pm 0.2$
d_{50}	1.5 $\mu\text{m} \pm 0.2$
Passing $\leq 2 \mu\text{m}$	70 % ± 2
Sieve residue $\geq 45 \mu\text{m}$	0.01 %

