

**TOR BRITE**

**THE SYNTHETIC ULTRA-WHITE PIGMENT**



**MAKE  $\text{TiO}_2$**

**EVEN BRIGHTER!**



# TOR BRITE® · TOR BRITE® F ALUMINUM MONOHYDRATE

## DESCRIPTION

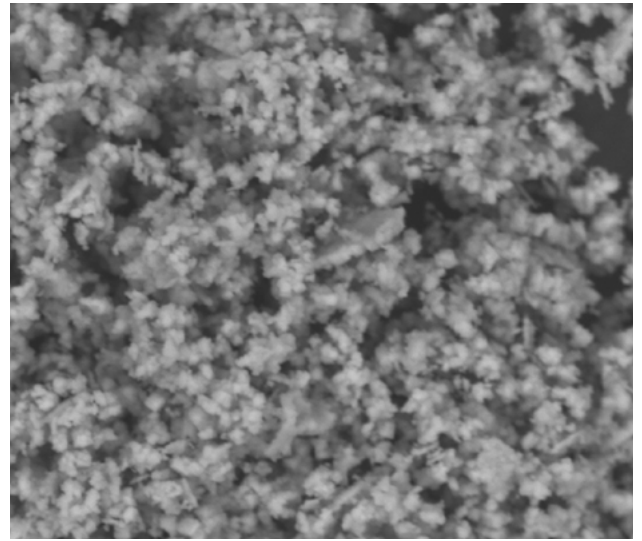
TOR BRITE offers exceptional brightness / whiteness as a TiO<sub>2</sub> synergist in applications including Paints & Coatings, Solid Surface, Engineered Stone and Gel Coats. Substitution of up to 35% of the white TiO<sub>2</sub> content in formulation can improve whiteness due to TOR BRITE's inherent low b value. Additional benefits of TOR BRITE include excellent processing behavior, low settling, easy cleaning behavior and flame retardant / smoke suppressant performance. TOR BRITE improves scratch resistance in Coatings and Solid Surface.

CHEMICAL ANALYSIS (TYPICAL)	TOR BRITE	TOR BRITE F
AlO(OH) content, %	99.9	99.9
Na <sub>2</sub> O, %	0.07	0.07
CaO	0.01	0.01
SiO <sub>2</sub> , %	0.01	0.01
Fe <sub>2</sub> O <sub>3</sub> , %	0.01	0.01
Moisture Content (105° C), %	0.3	0.3
Loss on Ignition (LOI) (1200°), %	17	17
Conductivity (μS/cm)	150	200

## PHYSICAL PROPERTIES (TYPICAL)

Particle Size (laser, Sympatec) - d <sub>50</sub> , (μm)	2.5	1.0
Specific Surface, (m <sup>2</sup> /g)	4.5	12
Specific Density, (g/cm <sup>3</sup> )	3.0	3.0
Bulk density, (kg/m <sup>3</sup> )	600	600
Oil Absorption, (%)	35	28
Hardness (Mohs)	4.5	4.5
Refractive Index	1.7	1.7

# **TiO<sub>2</sub> vs. TOR BRITE**



**SEM PICTURE OF TOR BRITE**

<b>PURE POWDER</b>	<b>PREMIUM TiO<sub>2</sub> RUTILE</b>	<b>TOR BRITE</b>
L*	95.49	97.79
a*	-0.70	0.11
b*	1.96	0.91
WI CIE*	79.94	90.37

<b>PIGMENT IN CURED UP RESIN</b>	<b>PREMIUM TiO<sub>2</sub> RUTILE</b> <small>16% TiO<sub>2</sub> in resin</small>	<b>TOR BRITE</b> <small>10.4% TiO<sub>2</sub> + 5.6% TOR BRITE</small>
L*	98.45	98.05
a*	-0.72	-0.55
b*	1.57	1.35

<b>ENGINEERED STONE COMPOUND</b>	<b>PREMIUM TiO<sub>2</sub> RUTILE</b> <small>3% TiO<sub>2</sub></small>	<b>TOR BRITE</b> <small>2% TiO<sub>2</sub> + 1% TOR BRITE</small>
L*	92.5	93.7
a*	-0.30	-0.25
b*	2.7	1.3

