

## AMPERIT<sup>®</sup> 827

<b>Chemical Formula</b>	ZrO <sub>2</sub> -Y <sub>2</sub> O <sub>3</sub> 93-7
<b>Chemical Name</b>	Zirconium Oxide-Yttrium Oxide 93-7
<b>Description of Product</b>	Agglomerated, Sintered
<b>Grades Available</b>	<b>Product Designation</b>
	AMPERIT <sup>®</sup> 827.006 125/45 μm
	AMPERIT <sup>®</sup> 827.007 90/16 μm
	AMPERIT <sup>®</sup> 827.054 45/10 μm

### Chemical Characteristics

(Mass fraction in % [cg/g]; ppm [μg/g])

Y <sub>2</sub> O <sub>3</sub>	7.0 - 8.0 %
Al <sub>2</sub> O <sub>3</sub>	max. 0.20 %
CaO	max. 0.20 %
Fe <sub>2</sub> O <sub>3</sub>	max. 0.20 %
HfO <sub>2</sub>	max. 2.0 %
MgO	max. 0.1 %
SiO <sub>2</sub>	max. 0.5 %
TiO <sub>2</sub>	max. 0.40 %
Th+U	max. 0.05 %
Other Oxides <sup>1)</sup>	max. 0.5 %
ZrO <sub>2</sub>	balance

### Physical Characteristics<sup>2)</sup>

	827.006	827.007	827.054
- 176 μm	min. 100 %	100 %	
- 88 μm			100 %
D 90 %	107 - 125 μm	85 - 99 μm	53 - 63 μm
D 50 %	68 - 77 μm	47 - 57 μm	31 - 39 μm
D 10 %	39 - 49 μm	21 - 30 μm	17 - 21 μm
Apparent Density acc. ASTM B 212	2.2 - 2.4 g/cm <sup>3</sup>	2.2 - 2.5 g/cm <sup>3</sup>	2.2 - 2.6 g/cm <sup>3</sup>
Phase Distribution		max. 6 % monoclinic ZrO <sub>2</sub>	

1) Other Oxides = K<sub>2</sub>O+Na<sub>2</sub>O; 2) MICROTRAC by Laser Light Diffraction per ASTM C 1070.

<b>References</b>	Material conforms to the following specifications - HTCT 650564 - DGTLV 504009001
<b>Packaging</b>	Standard Packaging 5 kg in one 2.5 l PE bottle, 6 bottles (30 kg) in one cardboard box.
<b>Storage and Handling</b>	Storage and handling are subject to the rules and regulations in the country of use.
<b>Hazards identification in Advertising (REGULATION (EC) No 1272/2008 Article 48)</b>	None.
<b>Documentation</b>	An inspection document in accordance with EN 10204 is supplied with every shipment.
<b>Remarks</b>	Always mix well before using.

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