

200 Executive Boulevard, Suite 200B, Ossining, NY 10562 USA Tel: (914)762-1540 ● Fax: (914) 762-1291

www.accumetmaterials.com e-mail: sales@accumetmaterails.com

## READY TO PRESS ALUMINA POWDERS

## Now you can manufacture customized alumina components quickly and at a fraction of the cost.

Accumet's ready-to-press alumina powders are available as 96% and 99.7% pure  ${\rm Al_2O_3}$ . These formulated alumina powders can be formed into dense alumina ceramic components via uniaxial or cold isostatic pressing and sintering. They are completely homogeneous, guaranteeing constant physical and chemical properties.

## MATERIAL PROPERTIES

	Accumet's	Accumet's	Accumet's	Measurement
Chemical Analysis	<b>AM 96</b>	AM 997	<b>AM 997F</b>	by/according to
$Al_2O_3$	96 %	99.7 %	99.7%	ICP/OES
Na <sub>2</sub> O	0.1 %	0.1 %	0.1%	ICP/OES
Physical Analysis				
Medium Grain Size Diameter	180-230 μm	160 – 200	90-110 um	DIN 68165 T2
Bulk Density	1250-1350 g/l	1.15 -1.25	1.15 -1.25	ISO 903
Moisture	0.1 – 0.3 %	0.2 – 0.5	0.2 - 0.4	DIN EN ISO 787
1				T2
Loss on Ignition <sup>1</sup>	Approx. 3.5%	3.0	3.6	ISO 806
Processing Characteristics <sup>2</sup>				
Sinter Temperature	1650 ° C	1600 ° C	1600 ° C	
Holding Time	1 hour	2 hours	2 hours	
Sinter Interval (dense ceramic parts)	1550 – 1600 ° C	1550 -1700° C	1520 -1700° C	
Sinter Density (typical)	3.74 – 3.80 g/cm <sup>3</sup>	3.86 – 3.92 g/cm <sup>3</sup>	3.90 - 3.94 g/cm <sup>3</sup>	
Isotropic Linear Shrinkage (referred to green	15.0 16.0 %	16.0 – 17.0 %	16.0 – 17.0 %	
body)	inter temperature			

<sup>1)</sup> RT -maximum sinter temperature

All data listed are reference values subject to production-related tolerances and may be altered without prior notice. It remains your obligation to check the products validity and to test our product as to his suitability for the intended processes and uses.

<sup>2)</sup> Pressing uniaxial or isostatic pressing strength: 100 – 300 N/mm<sup>3</sup>