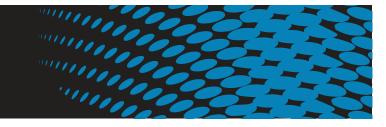
# FC3203



#### **Product Description**

ACI FC3203 is a carbon-filled flexible conductive ink for use on PET, polyimides, and other flexible substrates. This ink offers high conductivity for a 100% carbon conductor with rheology tailored toward low slump and fine feature resolution via screen printing. FE3203 has excellent adhesion and flex ductility to accommodate various packaging form-factors and use cases. The ink is fully compatible with other products in ACI's flexible electronics platform.

#### **Product Benefits**

- High conductivity carbon conductor
- Limited resistivity change associated with bending and flexing
- Good feature resolution
- Excellent adhesion to PET and polyimide
- Screen printable for volume applications
- Fully compatible with ACI's flexible adhesives and dielectrics

Typical Performance			
Volume Resistivity 120°C for 15 min in box oven		< 10 Ω/square/mil < 2.5 x 10 <sup>-2</sup> Ω*cm	
Adhesion <sup>1</sup>		5B	
<sup>1</sup> ASTM D3359 Method B			
Typical Properties			
Color	Black		
Viscosity <sup>2</sup>	125 Pa·s		
Density	1.17 g/mL		
Percent Solids <sup>3</sup>	36.7%		
Shelf Life at 20°C	12 Months		
Typical Processing Parameters			
Deposition Methods <sup>4</sup>	Screen, pad, µdispense		
Drying Time and	15′ ≥ 120°C box		
Temperatures	<5′ ≥120°C line oven		
Recommended Screen Meshes	145.0022" / 230.0011"		
Recommended Dry Film Thickness	10-15 μm		
Coverage	15 m2/kg / 25 m2/kg		
Mixing	bu	Slow thorough mix, avoid inducing bubbles, fixed spatula in rotating jar ideal <sup>5</sup>	
Thinner/Diluent	FE8106		
Clean Up Solvents	Acetone, MEK, and similar solvents		
<ul> <li><sup>2</sup> Anton Paar MCR302 10 s -1 at 25 o C</li> <li><sup>3</sup> 150 °C for 120 minutes in box oven</li> <li><sup>4</sup> Recommend DAC mixing prior to screen printing</li> <li><sup>5</sup> AT LM4 Stirring Tune Miyer (5211) recommended</li> </ul>			

<sup>5</sup> AT-LM4 Stirring Type Mixer (E211) recommended



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### Mailing and Shipment Address

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## Caution

Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapors emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

## Disclaimer

The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. Applied Cavitation, Inc. assumes no liability for any injury, loss, or damage, direct or consequential arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make their own tests to determine the suitability thereof for their particular use, before using it. User assumes all risk and liability whatsoever in connection with their intended use. Applied Cavitation's only obligation shall be to replace such quantity of the product proved defective.



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