

# DuPont CB200

## COPPER CONDUCTOR

### Technical Data Sheet

#### Product Description

DuPont CB200 copper conductor is primarily used to provide on-board electromagnetic interference/radio frequency interference (EMI/RFI) shielding on rigid circuits. It can also be used to fabricate low-voltage circuitry or jumpers in certain applications. DuPont CB200 is compatible with manual or automatic screen printing equipment.

#### Product Benefits

- Conductivity comparable to silver
- Strong adhesion to a wide variety of substrates
- Excellent printing properties

#### Processing

##### Screen Printing Equipment

Semi-automatic, manual

##### Substrate

Epoxy glass, phenolic paper, other rigid substrates

##### Ink Residence Time on Screen

2 hr

##### Screen Types

Stainless steel or polyester

##### Typical Cure Conditions

Box Oven: 160°C (320°F) for 30 min

IR Curing: 200°C (392°F) for 5 min

##### Typical Circuit Line Thickness Printed with 200-mesh stainless steel screen

20 - 25 microns

##### Clean up Solvent

Solfit® (3-methoxy-1-butanol),

Acetone

**Table 1**  
**Typical Physical Properties**

Test	Properties
Sheet Resistivity (mΩ/sq)	20 - 30
Adhesion/Tape Pull (3M Scotch Tape #600)	No Material Transfer
Abrasion Resistance, Pencil Hardness (H) (ASTM D3363-74)	> 5
Solderability (%)	Not Recommended
Change in Electrical Properties after Environmental Test	
Thermal Aging (85°C, 2000 hr)	ΔR < 30%
Heat/Humidity (60°C/95% RH/3000 hr)	ΔR < 45%
Thermal Cycling (-55<-> 125°C, 500 cycles)	ΔR < 30%
Solder Dip (260°C, 10 sec, 3 cycles)	ΔR < 5%
Pressure Cooker Test (121°C, 100% RH, 2 atm)	
8 hr	ΔR < 4%
24 hr	ΔR < 25%
Change in Physical Properties After Environmental Tests	Insignificant

**Table 2**  
**Composition Properties**

Viscosity (Pa.S) (Brookfield RVT, 10 rpm, #7 spindle & UC, 25°C)	75 - 85
Coverage, cm <sup>2</sup> /g	100 - 140
Thinner	DuPont 9245

Table 1 & 2 show anticipated typical properties for DuPont CB200 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

## Storage and Shelf Life

Containers should be stored, tightly sealed, in a clean, stable environment at 0 - 5°C. Shelf life of material in unopened containers is three months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

## Safety and Handling

For Safety and Handling information pertaining to this product, read the Material Safety Data Sheet (MSDS).

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