



# DUPONT™ 5402C

## PLATABLE C2 EDGE TERMINATION FOR CHIP RESISTOR APPLICATIONS

### PRODUCT DESCRIPTION

Especially developed for chip resistor applications, DuPont™ 5402C is a platable silver C2 edge termination that meets the needs for low cost and high performance.

### PRODUCT BENEFITS

- Low temperature firing
- Excellent dipping performance
- Excellent cosmetics
- Excellent post-plating adhesion
- High acid resistance
- Cadmium free\*

\*Cadmium “free” as used herein means that this is not intentionally added to the referenced product. Trace amounts however may be present.

### PROCESSING

#### Substrates

Reported properties are based on tests with 96% alumina substrates. Substrates of other compositions may yield variations in performance properties.

#### Dipping

Paste rheology of DuPont™ 5420C has been optimized for dipping of the chip resistor edges after the alumina substrate has been broken into strip form. While thinning is not normally recommended, DuPont™ 9245 thinner may be used for minor adjustments.

#### Drying

After dipping, parts should be allowed to level at room temperature for 5-10 minutes and then dried at 150°C for 10 minutes.

#### Firing

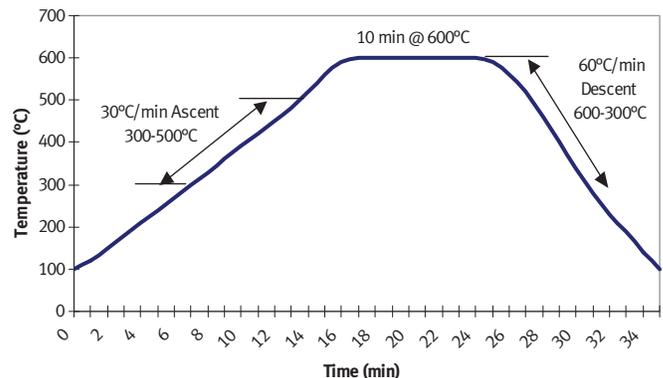
Fire to peak temperature of 600-620°C for 10 minutes at peak with a total firing cycle of 30 minutes. Allow adequate time (10 minutes) during heating cycle to avoid entrapment of organics in the fired film.

### Composition Properties

Test	Properties
Viscosity (Pa,S) (Brookfield RVT, UC&S, 10 rpm)	45 – 55
Thinner	DuPont™ 9245

This table shows anticipated typical physical properties for DuPont™ 5402C based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

### Typical 600°C 10 Minute Profile



### STORAGE AND SHELF LIFE

Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25°C). Shelf life of material in unopened containers is six months from date of shipment. Some settling of solids may occur and composition should be thoroughly mixed prior to use.

### SAFETY AND HANDLING

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



## **DUPONT™ 5402C**

### **PLATABLE C2 EDGE TERMINATION FOR CHIP RESISTOR APPLICATIONS**

**FOR MORE INFORMATION ON DUPONT™ 5402C OR OTHER DUPONT MICROCIRCUIT MATERIALS PRODUCTS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:**

#### **Americas**

DuPont Microcircuit Materials  
14 TW Alexander Drive  
Research Triangle Park, NC 27709  
USA  
Tel +1 800 284 3382 (calls within USA)  
Tel +1 919 248 5188 (calls outside USA)

#### **Europe, Middle East & Africa**

Du Pont (UK) Ltd  
Coldharbour Lane  
Bristol BS16 1QD  
UK  
Tel +44 117 931 3191

#### **Asia**

Du Pont Kubushiki Kaisha  
MCM Technical Lab  
DuPont Electronics Center  
KSP R&D B213, 2-1,  
Sakado 3-chome, Takatsu-ku,  
Kawasaki-shi, Kanagawa, 213-0012  
Japan  
Tel +81 44 820 7575

DuPont Taiwan Ltd  
45, Hsing-Pont Road  
Taoyuan, 330  
Taiwan  
Tel +886 3 377 3616

DuPont China Holding Company Ltd  
Bldg. 11, 399 Keyuan Road  
Zhangjiang Hi-Tech Park  
Pudong New District  
Shanghai 201203  
Tel +86 21 3862 2888

DuPont Korea Inc.  
3-5th Floor, Asia tower #726  
Yeoksam-dong, Gangnam-gu  
Seoul 135-719, Korea  
Tel +82 2 2222 5275

E.I. DuPont India Private Limited  
7th Floor, Tower C, DLF Cyber Greens  
Sector-25A, DLF City, Phase-III  
Gurgaon 122 002 Haryana, India  
Tel +91 124 409 1818

Du Pont Company (Singapore) Pte Ltd  
21 Biopolis Road,  
#06-21, Nucleos, South Tower,  
Singapore 138567  
Tel +65 6586 3022

**[mcm.dupont.com](http://mcm.dupont.com)**

Copyright © 2017 DuPont. All rights reserved. The DuPont Oval Logo, DuPont™, and all DuPont products denoted with ® or ™ are registered trademarks or trademarks of E. I. du Pont de Nemours and Company or its affiliates.

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in end-use conditions, DuPont makes no warranties, and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right.

CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Medical Caution Statement," H-50102-5.

K-29527 (4/17)