

## VULCAN<sup>®</sup> XC500 Conductive Carbon Black



### Product Highlights

VULCAN XC500 conductive carbon black is Cabot's flagship product from our XC-family of conductive carbon blacks. VULCAN XC500 conductive carbon black offers excellent conductivity, cleanliness, and consistency while dispersing easily into the polymer, ensuring an easy-to-process compound. This combination of cleanliness, conductivity, and processability delivers excellent surface smoothness, offering strong performance in both medium voltage (MV) and high voltage (HV) semicon shields for power cables. In addition, it can enable extended screen pack life during compounding due to its high cleanliness, thereby enhancing compounding efficiency and effectiveness.

### Key Applications

VULCAN XC500 conductive carbon black is suitable for use in the following power cable shields:

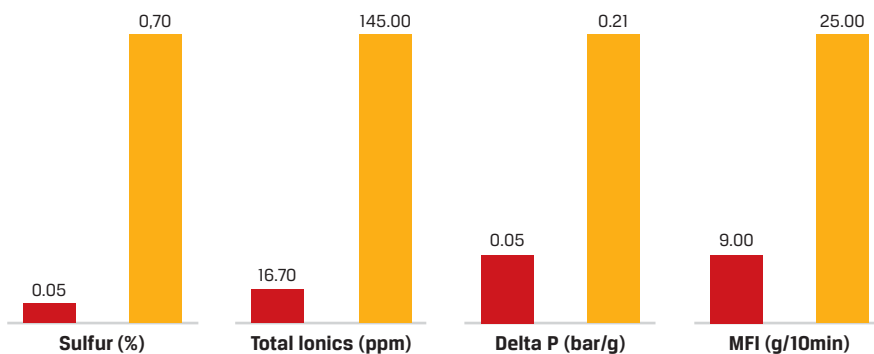
- ◆ Conductor shield used in medium voltage power cables
- ◆ Insulation shield used in medium voltage power cables
- ◆ Bonded shields used in high voltage power cables

### Performance Features

VULCAN XC500 conductive carbon black has several important features that help enable long-term power cable performance:

- ◆ Excellent conductivity, protecting against premature cable failure
- ◆ Extremely low sulfur levels and ionic impurities, delivering a smooth finish and a high quality shield
- ◆ Good retention of mechanical properties of the underlying polymer
- ◆ Easy to process

**VULCAN XC500 conductive carbon black offers superior cleanliness with excellent processability**



MFI: MFI is measured at 190°C/21.6 kg

Delta P: Delta P pressure filter test measures the pressure increase in a 500 mesh screen pack

■ VULCAN XC500 carbon black  
■ Standard conductive carbon black

# VULCAN<sup>®</sup> XC500 Conductive Carbon Black

## Typical Properties

PROPERTY	VALUES	TEST METHOD
Iodine number (mg/g)	74	ASTM D-1510
OAN (cc/100g)	148	ASTM D-2414
325 mesh residue (ppm)	< 10	ASTM D-3265
Ash (%)	< 0.1	ASTM D-1506
Total Sulfur (%)	< 0.10	ASTM D-1619

The data in the table above are typical test values intended as guidance only, and are not product specifications. Product specifications are available upon request from your Cabot representative.

### Product Form & Logistics

- ◆ Product Form: Pellets
- ◆ Regional Availability: Global
- ◆ Bag Packaging Options: 15 kg polyethylene
- ◆ Bulk Packaging Options: 750 kg FIBC

Refer to the Material Safety Data Sheet (MSDS) for recommended storage conditions, available through your Cabot representative or on [www.cabotcorp.com](http://www.cabotcorp.com).



[www.cabotcorp.com](http://www.cabotcorp.com)

#### NORTH AMERICA

Cabot Corporation Business and Technical Center  
157 Concord Road  
Billerica, MA 01821-7001  
USA

**TEL** +1 800 462 2313  
**FAX** +1 978 670 7035

#### SOUTH AMERICA

Cabot Latin American Division  
Rue do Paraíso, 148 - 5º andar  
04103-000, Sao Paulo, SP BRAZIL

**TEL** +55 11 2144 6400  
**FAX** +55 11 3253 0051

#### EUROPE

SIA Cabot Latvia  
101 Mukusalas Street  
Riga, LV-1004, LATVIA

**TEL** +371 6705 0984  
**TEL** +371 6705 0900  
**FAX** +371 6705 0985

#### MIDDLE EAST/AFRICA

Cabot Specialty Chemicals  
Jebel Ali Free Zone  
LOB 15, Office 424  
Dubai

UNITED ARAB EMIRATES  
**TEL** +971 4 8871 800  
**FAX** +971 4 8871 801

#### ASIA PACIFIC

Cabot China Ltd.  
558 Shuangbai Road  
Shanghai 201108, CHINA

**TEL** +86 21 5175 8800  
**FAX** +86 21 6434 5532

#### JAPAN

Cabot Specialty Chemicals, Inc.  
Sumitomo Chiba-Daimon Bldg. 3 F  
2-5-5 Shiba Daimon,  
Minato-ku, Tokyo 105-0012,  
JAPAN

**TEL** +81 3 6820 0255  
**FAX** +81 3 5425 4500

The data and conclusions contained herein are based on work believed to be reliable, however, Cabot cannot and does not guarantee that similar results and/or conclusions will be obtained by others. This information is provided as a convenience and for informational purposes only. No guarantee or warranty as to this information, or any product to which it relates, is given or implied. This information may contain inaccuracies, errors or omissions and CABOT DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO (i) SUCH INFORMATION, (ii) ANY PRODUCT OR (iii) INTELLECTUAL PROPERTY INFRINGEMENT. In no event is Cabot responsible for, and Cabot does not accept and hereby disclaims liability for, any damages whatsoever in connection with the use of or reliance on this information or any product to which it relates.

The Vulcan and XC names are trademarks of Cabot Corporation.

©2015 Cabot Corporation.  
03/2015