

# E2C<sup>®</sup> DX9660 elastomer composite



### GENERAL DESCRIPTION

Cabot Corporation's engineered elastomer composite (E2C<sup>®</sup>) solutions are designed for superior particle dispersion and enhanced polymer-particle interaction, which results in stronger reinforcement, improved resistance to damage and reduced hysteresis.

### PERFORMANCE FEATURES

E2C DX9660 elastomer composite is designed to have very high level of abrasion resistance and good hysteresis. It features high 300% modulus and dynamic stiffness.

### TYPICAL APPLICATIONS

- ◆ On road truck tire tread/retread
- ◆ Non-tire rubber products for high abrasion:
  - Mill liner with high abrasion (Secondary mill)
  - Trommel screen panel
  - Ultra-high abrasion conveyor belt
  - High abrasion rubber track
  - Other rubber parts with high abrasion

# E2C™ DX9660 elastomer composite

### TEST SETUP:

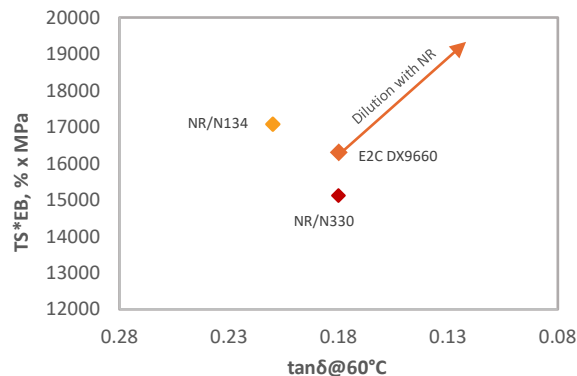
E2C compound follows Cabot Light Touch™ mixing protocols with two-stage compounding; NR/N134 reference compound uses three-stage compounding, NR/N330 reference compound uses two-stage compounding. NR=natural rubber. CB=carbon black.

### PERFORMANCE

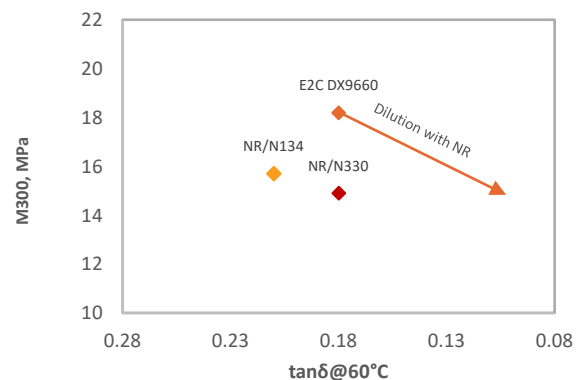
	E2C DX9660 elastomer composite	NR/ ASTM N134 CB	NR/ ASTM N330 CB
Compounding Stages	2	3	2
Mooney Viscosity ML (1+4) at 100° C, M.U.	84	80	71
300% Modulus, MPa	18.2	15.7	14.9
Tensile Strength, MPa	33.3	32.1	29.2
Elongation at Break, %	489	533	518
Tanδ at 60° C	0.18	0.21	0.18

- ◆ **Performance:** E2C DX9660 elastomer composite has similar TS\*EB and higher M300 vs. NR/N134 compound, with tanδ values similar to NR/N330 compound.
- ◆ **Processing:** E2C DX9660 elastomer composite can reduce mixing stages while having similar processability compared to NR/N134 compounds.
- ◆ **Flexibility:** Dilution of E2C DX9660 elastomer composite enables additional performance space.

**Figure 1. E2C DX9660 elastomer composite has high toughness while having low**



**Figure 2. E2C DX9660 elastomer composite has high M300 and low hysteresis loss**



For more information, please refer to the applicable Safety Data Sheet (SDS) available from your Cabot representative at [cabotcorp.com/contact](https://cabotcorp.com/contact).

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