

E2C[®] DZ8650 elastomer composite



GENERAL DESCRIPTION

Cabot's engineered elastomer composite (E2C[®]) solutions are designed for superior particle dispersion and enhanced polymer-particle interaction, which result in stronger reinforcement, improved resistance to damage and reduced hysteresis.

PERFORMANCE FEATURES

E2C[®] DZ8650 elastomer composite offers improvements in erosion resistance and mechanical strength versus conventional reinforcing materials.

TYPICAL APPLICATIONS

- ◆ Off-the-road tread/retread for high durability
- ◆ Screen panel for optimizing durability and throughput
- ◆ Agricultural rubber track
- ◆ Small particle mining applications with abrasion:
 - Mill liner
 - Slurry pump liner
 - Cyclone liner
 - Hose liner

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TEST SETUP:

E2C mixing follows Cabot Light Touch™ mixing protocols; reference compound uses two-stage mixing. NR=natural rubber. CB=carbon black.

PERFORMANCE	E2C DZ8650 elastomer composite	NR/ ASTM N330 CB	NR/ ASTM N220 CB
Mooney Viscosity ML (1+4) at 100° C, M.U.	75	73	79
100% Modulus, MPa	2.2	2.4	2.5
300% Modulus, MPa	12.9	12.1	12.1
Tensile Strength, MPa	30.4	29.0	29.6
Elongation at Break, %	591	604	606
Rebound (%)	52	51	48
DIN Abrasion Volume Loss, mm ³	123	138	133

Formulations: NR based formulation, at equal 50 phr CB loading

Figure 1. E2C DZ8650 elastomer composite has high toughness while having high abrasion resistance

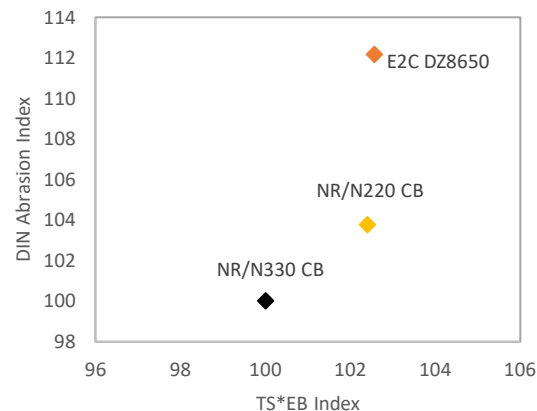
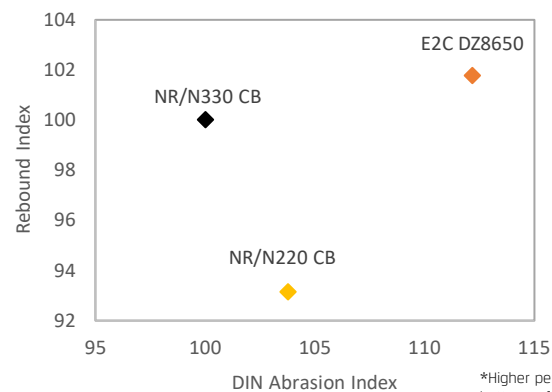


Figure 2. E2C DZ8650 elastomer composite has high abrasion resistance and good rebound



*Higher performance index means better performance

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

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