

## ENDURE™ E23 carbon black



### GENERAL DESCRIPTION

Many industrial rubber product applications operate under severe conditions that lead to significant wear and tear. Improved durability of the rubber components may provide a distinct total cost advantage. As part of Cabot's ongoing commitment to deliver solutions that meet our customers' needs, we have developed the ENDURE™ family of carbon blacks engineered for durability.

Improving wear, chunking and tear resistance or reducing heat buildup can result in longer part life, reducing costly equipment downtime, increasing throughput and enhancing end user profitability. Cabot products can enhance rubber part life and durability by optimizing the balance between heat buildup and reinforcement and are identified by the letter "D" in the ENDURE nomenclature system.



In certain applications such as conveyor belts, reduced hysteresis in the rubber compound may also be of interest as it can result in decreased power consumption, representing a significant energy and operating cost saving. In other applications such as rubber tracks and certain mill liners, a decrease in hysteresis can help with extending part life. Cabot products can help reduce energy costs and part life by optimizing the balance between hysteresis and reinforcement and are identified by the letter "E" in the ENDURE nomenclature system.

### PERFORMANCE FEATURES

ENDURE™ E23 carbon black offers similar wear to ASTM N234 carbon blacks with improved levels of hysteresis. Dispersion and recommended mixing protocols are similar to ASTM N200 series carbon blacks.

### TYPICAL APPLICATIONS

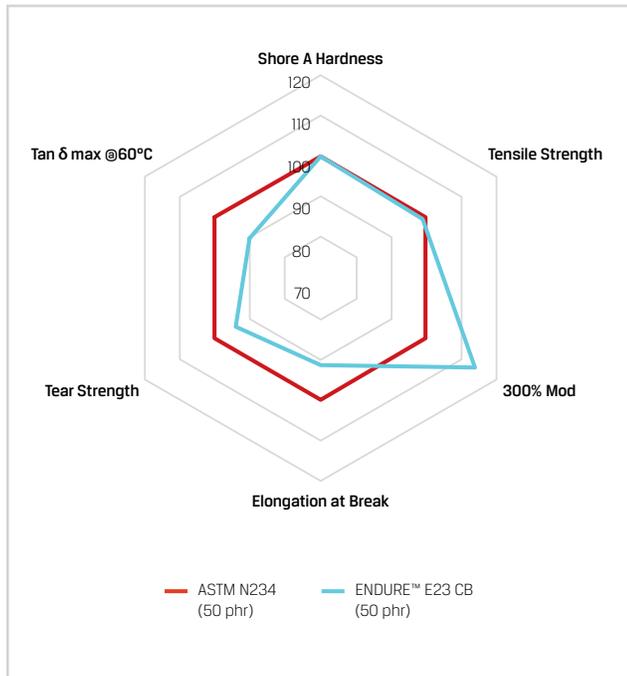
- ◆ Tread of rubber tracks
- ◆ Mining mill liners
- ◆ Cover of high abrasion resistant conveyor belts

# ENDURE™ E23 carbon black

## TECHNICAL DATA

ENDURE™ E23 carbon black can reduce the hysteresis of rubber compounds compared to compounds made with ASTM N200 series carbon black, while maintaining good reinforcement properties.

100 NR Formulation	ASTM N234	ENDURE™ E23 CB
Loading, (phr)	50	50
Hardness, (Shore A)	65	65
Tensile Strength, (MPa)	29.7	29.4
100% Mod, (MPa)	2.7	3.3
300% Mod, (MPa)	14.2	16.2
Elongation at Break, (%)	540	495
Tear Strength, (N/mm)	182	171
Rebound @23°C, (%)	49	52
Tan δ max @60°C	0.2	0.18



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