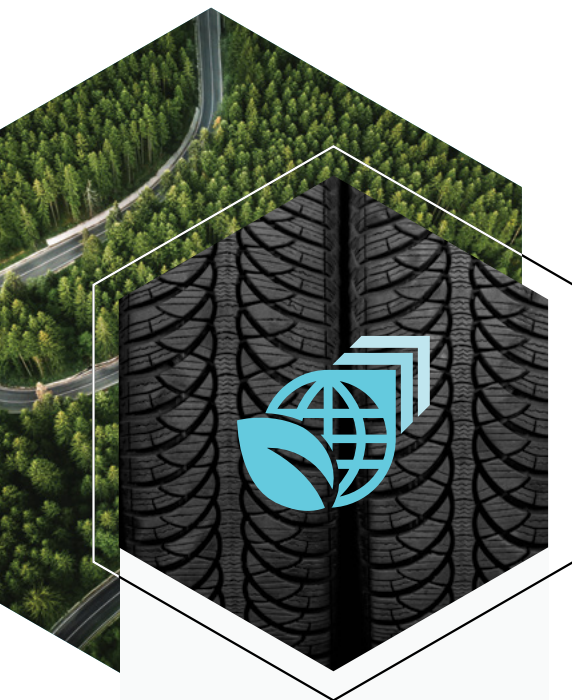


VULCAN® 7H-C Circular Reinforcing Carbon



ABOUT EVOLVE™ SUSTAINABLE SOLUTIONS

EVOLVE Sustainable Solutions is Cabot's technology platform for delivering sustainable reinforcing carbons. Products powered by EVOLVE Sustainable Solutions offer sustainable content with reliable performance at industrial scale, using circular value chains, renewable and bio-based materials, and processes that reduce our greenhouse gas footprint.

VULCAN® 7H-C circular reinforcing carbon, powered by EVOLVE™ Sustainable Solutions, is a reinforcing material made from ISCC PLUS certified tire pyrolysis oil (TPO). Products produced using TPO offer the same quality and performance as Cabot's traditional reinforcing carbons and can be used as drop-in solutions. ISCC is a globally leading certification system for feedstocks and markets to ensure sustainable content and traceability in supply chains.

Learn more: iscc-system.org

PERFORMANCE FEATURES

VULCAN 7H-C circular reinforcing carbon conforms to ASTM N234 carbon black target values and is higher in surface area and structure than other tire tread products such as ASTM N220 and ASTM N339 type carbon blacks. It disperses well and gives moderately high modulus while imparting excellent extrusion characteristics to rubber compounds.

Compared to ASTM N300 series and ASTM N220 type carbon blacks, VULCAN 7H-C circular reinforcing carbon enhances wear resistance in tire tread compounds. VULCAN 7H-C circular reinforcing carbon can offer up to 10% better tread wear resistance than a standard ASTM N220 type carbon black.

VULCAN 7H-C circular reinforcing carbon provides, via ISCC PLUS mass balance approach, the possibility to increase the sustainable content in the final application with drop-in performance versus standard VULCAN 7H-C carbon black.

Properties	Test Method (ASTM)	UNITS	TYPICAL VALUE
Iodine adsorption number	D1510	mg/g	120
Oil absorption number (OAN)	D2414	ml/100g	125
OAN after crushing (COAN)	D3493	ml/100g	101
Tinting strength	D3265	%	124
STSA surface area	D6556	m ² /g	113

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PRODUCT DATA SHEET

TYPICAL APPLICATIONS

VULCAN 7H-C circular reinforcing carbon is particularly well suited for synthetic and natural rubber-based tire treads that require excellent wear resistance. It is also recommended for conveyor belts, solid tires, and other industrial rubber products requiring excellent abrasion resistance, such as:

- ◆ Treads of premium passenger car tires, truck tires and solid tires
- ◆ Truck tire retreads
- ◆ Conveyor belts

TECHNICAL DATA

Test Formulation: 89 phr SBR1712, 35 ph BR, 11 phr Free oil

	VULCAN® 7H-C circular reinforcing carbon	ASTM N220	ASTM N110
Loading (phr)	75	75	75
Processing Properties			
Mooney Viscosity			
ML(1+4) at 100 °C (M.U.)	52	45	48
Extrusion Shrinkage ASTM D2230			
Method B, % Relative to VULCAN® 7H-C	100	104	111
Visual Dispersion			
ASTM D2663	4.4	4.4	4.3
Physical Properties			
Hardness			
Shore A	58	56	56
Tensile Properties			
Tensile Strength, MPa	21.0	19.5	20.3
300% Modulus, MPa	7.5	7.1	6.4
Elongation at Break, %	585	590	600
Resilience, ASTM D1054			
Cured 70% relative to VULCAN® 7H-C	100	107	102
Tread Wear Rating Index*	100	90	93

* High is better

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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