CARBON BLACK



VULCAN®3



VULCAN® 3 carbon black has been in the Cabot portfolio for many years. It is an industry standard for many tire applications, including both tread and carcass applications. VULCAN 3 conforms to ASTM N330. It imparts moderate wear resistance to all tire tread rubbers. VULCAN 3 is also an exceptionally easy grade to disperse and extrude. It is the middle black of a family of carbon blacks with "82" iodine number but increasing structure levels: N326, N330, and N347.

VULCAN 3 is particularly suited for tire treads that require only moderate wear resistance, including those made from emulsion SBR, solution SBR, BR, natural rubber, or blends of any of these polymers. In the industrial rubber goods area, VULCAN 3 is also recommended for conveyor belts, solid tires, and other products requiring moderate abrasion resistance.

Performance Features

- Moderate abrasion resistance
- · Ease of dispersion
- · Excellent extrusion characteristics

Typical Applications

- · Passenger tire treads
- Truck tire treads
- Passenger and truck tire sidewalls
- Tube applications
- Industrial product applications including solid tires, roller covers, hose covers, seals, and molded compounds

VULCAN 3 Carbon Black from Cabot Corporation

VULCAN 3 carbon black represents the traditional way to obtain moderate treadwear and abrasion resistance. Its excellent extrusion characteristics and ease of dispersion make it factory friendly.

Recipe: 65 S-1712 / 35 BR, 75 black, 50 total oil, 3 ZnO, 2 stearic acid, 2 AO, 2.5 wax, 1.4 CBS, 1.75 S

Carbon Blacks	VULCAN K / N351	VULCAN 3 / N330	VULCAN 3H / N347
Treadwear rating	102	100	108



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Processing Properties

Carbon Blacks		VULCAN K / N351	VULCAN 3 / N330	VULCAN 3H / N347
Mooney Viscosity				
ML 1+4 @ 100C		37	36	42
Mooney Scorch ML @ 135C	T10	19.5	20.7	18.7
Extrusion Shrinkage ASTM D 2230, method % relative to N330	В	89.4	100	86.1

Physical Properties

Carbon Blacks	VULCAN K / N351	VULCAN 3 / N330	VULCAN 3H / N347
ASTM D 1765			
Cured 60' @ 145C			
Tensile Strength, MPa	19.0	18.3	18.6
300% Modulus, MPa	8.4	6.6	8.8
Elongation at break,%	560	630	530
Hardness, Shore A2	56	54	55

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