

# **VULCAN<sup>®</sup> M**



VULCAN® M carbon black is the most cost-effective carbon black to use when treadwear comparable to a standard N220 is needed. Compared to N220, VULCAN M offers wear and more value to the customer. When compared to the traditional grade N347, VULCAN M offers improved wear at comparable cost.

VULCAN M was introduced by Cabot Corporation in the early 1970's as part of a family of blacks that incorporated a breakthrough reactor technology. It imparts good wear resistance to all tire tread rubbers. VULCAN M is also a high structure carbon black; thus it disperses well and gives moderately high modulus, while imparting excellent extrusion characteristics to rubber compounds. VULCAN M conforms to ASTM grade N339.

VULCAN M is particularly suited for tire treads that require good 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 M is also recommended for conveyor belts, solid tires, and other products requiring excellent abrasion resistance.

#### **VULCAN M Carbon Black from Cabot Corporation**

#### Performance Features

- · Good abrasion resistance
- Ease of dispersion
- Excellent extrusion characteristics
  Economical

### **Typical Applications**

- Passenger tire treads and retreads
- · Retread truck tires
- Industrial product applications including seals, moldings, hose covers, and conveyor belts

VULCAN M carbon black represents an economical way to obtain good 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 6 / N220	VULCAN M / N339	VULCAN 3H / N347
Treadwear rating	100	99	95

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## **Processing Properties**

Carbon Blacks		VULCAN 6 / N220	VULCAN M / N339	VULCAN 3H / N347
Mooney Viscosity				
ML 1+4 @ 100C		46	46	44
Mooney Scorch				
ML @ 135C	T5	17.2	14.4	16.3
	T10	18.6	15.6	18.1
Extrusion Shrinkage				
ASTM D 2230, method B				
% relative to N220		100	94.3	94.0

# **Physical Properties**

Carbon Blacks	<b>VULCAN 6 / N220</b>	VULCAN M / N339	VULCAN 3H / N347
ASTM D 1765			
Cured 60' @ 145C			
Tensile Strength, MPa	20.1	19.6	19.3
300% Modulus, MPa	7.8	9.3	9.0
Elongation at break,%	560	530	530
Hardness, Shore A2	56	56	55

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