PRODUCT DATA SHEET

VULCAN® XC72 carbon black

GENERAL DESCRIPTION

VULCAN XC72 carbon black is designed to impart electrical conductivity to rubber and plastic compounds. VULCAN XC72 carbon black has exceptional purity, demonstrated by an extremely low solvent extract level, sulfur content, ash level and sieve residue.

VULCAN XC72 carbon black is an industry standard, with proven performance for conductivity for many years in a wide range of anti-static and conductive rubber and plastic applications.

PERFORMANCE FEATURES

VULCAN XC72 carbon black has better electrical conductivity properties in rubber than Cabot VULCAN P and STERLING® C conductive carbon blacks. The percolation curve of VULCAN XC72 carbon black relative to other carbon blacks in rubber can be found below.

Rubber components having electrical resistivity in the range of 103 to 106 ohm·cm are normally classified as “antistatic” and components below 103 ohm·cm are classified as “conductive.” VULCAN XC72 carbon black can meet these conductivity requirements without the need for very high carbon black loadings. VULCAN XC72 carbon black is easier to disperse in rubber than VULCAN P and STERLING C conductive carbon blacks.

The rubber reinforcement properties of VULCAN XC72 carbon black are comparable to ASTM N330 type carbon blacks with higher dynamic stiffness and low extension modulus.

VULCAN XC72 carbon blacks has better dynamic properties than VULCAN P and STERLING C conductive carbon blacks.

TYPICAL APPLICATIONS

- Anti-static and conductive rubber applications
- Hospital flooring and sheeting
- Conveyor and power transmission belts
- Printing rolls
- Hoses for mining, petroleum
- Cable screening

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TECHNICAL DATA

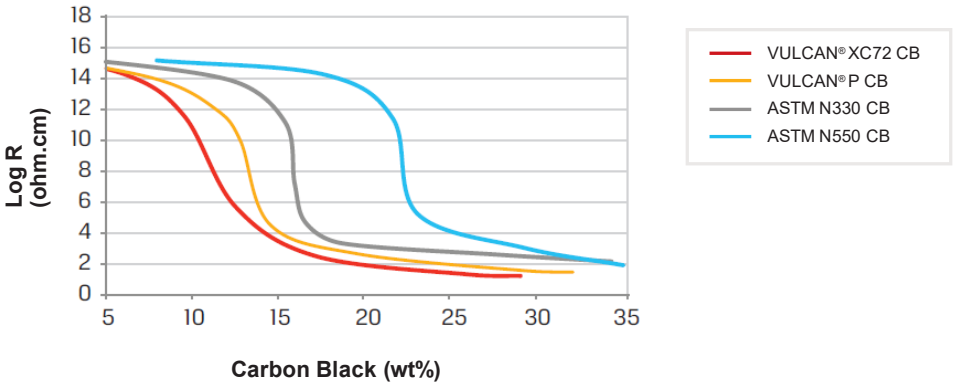
TEST FORMULATION: 100 phr EPDM, 75 phr paraffinic oil, 65 phr $CaCO_3$ with sulfur cure vulcanization system.

	VULCAN XC72 CB	VULCAN P CB	ASTM N330 CB
Loading (phr):	88	103	96

PROPERTIES

Mooney Viscosity ML (1+4) at 100°C, (M.U.)	75	66	58
Hardness, Shore A	66	67	65
Tensile Strength, MPa	14.0	13.3	13.8
100% Modulus, MPa	3.1	2.8	2.9
200% Modulus, MPa	5.6	5.6	6.0
300% Modulus, MPa	7.7	8.3	9.0
Elongation at Break, %	517	510	436
Zwick Rebound, %	39	35	39

PERCOLATION CURVE IN THE EPDM TEST FORMULATION



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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