

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



VULCAN® XC72 carbon black

TECHNICAL DATA

TEST FORMULATION: 100 phr EPDM, 75 phr paraffinic oil,

65 phr CaCO₃ with sulfur cure

vulcanization system.

Looding	(nhr).
Loading	(hut):

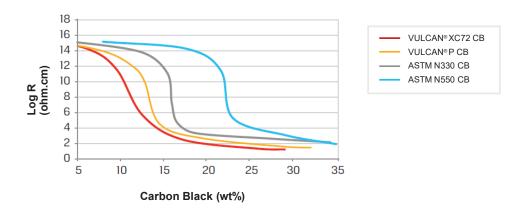
VUL	CAN XC72 CB	VULCAN P CB	ASTM N330 CB
	88	103	96

PROPERTIES

Mooney Viscosity
ML (1+4) at 100°C, (M.U.)
Hardness, Shore A
Tensile Strength, MPa
100% Modulus, MPa
200% Modulus, MPa
300% Modulus, MPa
Elongation at Break, %
Zwick Rebound, %

75	66	58
66	67	65
14.0	13.3	13.8
3.1	2.8	2.9
5.6	5.6	6.0
7.7	8.3	9.0
517	510	436
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.

This information is provided as a convenience and for informational purposes only. No guarantee or warranty as to this information, or any product to which it relates, is given or implied. Cabot disclaims all warranties express or implied, including intellectual property infringement, merchantability or fitness for a particular purpose as to (i) such information, or (ii) any product. In no event is Cabot responsible for, and Cabot does not accept and hereby disclaims liability for, any damages whatsoever in connection with the use of or reliance on this information or any product to which it relates.

