



255 Fountain Street Akron, Ohio 44304-1991
 330-535-2100 ♦ 800-321-2260 ♦ Fax 330-535-8947

CARBON BLACKS
-Conductive-

STERLING® C, VULCAN® XC72

PRODUCT DESCRIPTION:

Sterling C (N293) and Vulcan XC72 (N472) are both industry standard conductive carbon blacks. Sterling C is the economical choice for achieving conductive or static dissipating levels for a vast range of rubber and plastic applications. Vulcan XC72 is utilized in very demanding applications like ESD (Electrostatic Discharge), power cable, magnetic media parts and devices where increased and maintained conductive and static dissipation properties are required. Compounders have found that Vulcan XC72 has extended their part's life expectancy due to XC72 low levels of sulfur and ash.

TYPICAL PROPERTIES:	ASTM#	STERLING C	VULCAN XC72
Iodine Absorption Number, mg/g	D1510	145	253
DBP Absorption, ml/100g	D2414	100	175
Ash, %	D1506	0.6	0.1
Heat Loss, %	D1509	0.7	0.4
35 Mesh Sieve Residue, ppm	D1514	1.5	0.0
325 Mesh Sieve Residue, ppm	D1514	5.0	2.0

APPLICATIONS:

Compounders view Sterling C as their standard, general purpose conductive black and utilize this conductive black for applications that require a moderate level of conductivity or eliminate annoying static charge. Typical applications include, wire and cable jacketing, static-dissipating hoses, belts, shoe soles, floor mats, etc. Sterling C combines excellent abrasion resistance, tear and tensile strength with good dispersion, processing and conductivity retention after flexing. Typical loading range is 30 – 100 phr depending on the required conductivity and polymer type.

Vulcan XC72 is considered a very high conducting carbon black used in critical applications like: power cables' conductive and insulation shields, ESD sensitive components, safety packages for hazardous goods, articles used in explosive areas, magnetic media, etc. Considerably less loadings are required; typical range is 15 – 50 phr. This black has excellent dispersability and due to low loadings allows compounds to be one pass mixed. Care must be taking while processing any conductive black. Over mixing and/or processing can greatly diminish the blacks ability to conduct or dissipate electricity.

© *STERLING and VULCAN registered trade names of Cabot Corporation*

jh 0703, t-sterling c, vulcan xc72

Included with its product literature and upon the request of its customers, Akrochem provides product specifications and evaluations, suggested formulations and recommendations and other technical assistance, both orally and in writing (collectively the "Technical Information"). Although Akrochem believes all Technical Information to be true and correct, it makes no warranty, either express or implied, as to the accuracy, completeness, or fitness of the Technical Information for any intended use, or the results which may be obtained by any person using the Technical Information. Akrochem will not be liable for any cost, loss or damage, in tort, contract or otherwise, arising from customer's use of Akrochem products or Technical Information. It is the customer's sole responsibility to test the products and any Technical Information provided to determine whether they are suitable for the customer's needs. Before working with any product, the

customer must read and become familiar with available information concerning its hazards, proper use, storage and handling, including all health, safety, and hygiene precautions recommended by the manufacturer. Nothing in the Technical Information is intended to be a recommendation to use any product, method, or process in violation of any intellectual property rights governing such product, method, or process. No license is implied or granted by Akrochem as to any such product, method, or process. AKROCHEM CORPORATION DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE, RELATED TO ANY PRODUCTS OR TECHNICAL INFORMATION PROVIDED BY AKROCHEM.