

CARBON BLACK
ASTM (D1765) REFERENCE: N539
FORMER INDUSTRY REFERENCE: FEF-LS



STERLING® SO-1



Description

STERLING® SO-1 furnace black is a pelleted semi-reinforcing grade of the class previously known as Fast Extrusion Furnace-Low Structure black (FEF-LS), now defined in ASTM D1765 as N539. STERLING SO-1 carbon black has surface area per unit mass closely similar to that of STERLING SO grade (see values for iodine number and STSA), while having a lower degree of particle aggregation (structure) and similar aggregate size (as indicated by DBPA and tint results, respectively).

Together, STERLING SO-1 and STERLING SO carbon blacks are the most reinforcing members of the range of Cabot semi-reinforcing grades. Compared with the Cabot reinforcing grades, STERLING SO-1 carbon black and all the Cabot semi-reinforcing grades give easier processing compounds with good dispersion and higher loading capacity, but with significantly lower levels of reinforcement, as indicated particularly by lower tensile

strength in non-crystallizing polymers (e.g. SBR), lower tear strength and abrasion resistance, and higher resilience. With the exception of lower hardness and modulus, and slightly greater die swell, STERLING SO-1 carbon black gives properties in rubber generally similar to those given by STERLING SO grade. Slightly higher loadings are possible, leading to economy in compound cost.

Applications

Applications of tire manufacture include tire carcass and tube compounds. Principal applications in industrial rubber products are in those produced by extrusion, including hose, weatherstrips and extruded profiles. There are also applications in single-ply roofing, seals and moldings.

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. This information may contain inaccuracies, errors or omissions and CABOT DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO (i) SUCH INFORMATION, (ii) ANY PRODUCT OR (iii) INTELLECTUAL PROPERTY INFRINGEMENT. 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.

NORTH AMERICA

Cabot Corporation
Rubber Blacks
1095 Windward Ridge Pkwy
Suite 200
Alpharetta, GA 30005
(800) 472-4889
www.cabot-corp.com

SOUTH AMERICA

Cabot Brasil Industria e Comércio
Ltda.
Av. João Castaldi, 88
04517-900 São Paulo, SP
Brazil
Tel: (55-11) 5536-0388
www.cabot-corp.com

EUROPE

Cabot Europe Ltd./Cabot
Europe/Cabot GIE
Le Nobel 4B
2 rue Marcel Monge
92158 Suresnes Cedex, France
Tel: (33-1) 46-97-58-00
www.cabot-corp.com

ASIA, PACIFIC

Asia Pacific Region
Level 14, MNI Tower 2,
11 Jalan Pinang
50450 Kuala Lumpur, Malaysia
Tel: (60-3) 2164 8352
www.cabot-corp.com