

STERLING® NS



Description

STERLING® NS and STERLING NS-1 carbon blacks are pelleted furnace blacks of the class known as "Semi-Reinforcing Furnace black" (SRF). The ASTM D1765 reference code for STERLING NS carbon black is N774, the code for STERLING NS-1 carbon black is ASTM N762. STERLING NS carbon black has a similar very low surface area per unit as STERLING NS-1, but with a higher structure reflected by the higher DBPA and C-DBPA.

STERLING NS carbon black has good dispersibility in natural and synthetic rubbers, with easy mixing even at high black loading. Uncured compounds have low viscosity and generate relatively little heat in processing, but show, at a given loading, higher die swell and extrusion shrinkage than other ASTM semi-reinforcing grades except STERLING NS-1. Vulcanised compounds have lower modulus and tensile strength, but higher resilience, lower compression set and higher electrical resistivity than those containing other ASTM furnace blacks at the same loading.

The low surface area and low structure allow high loading to be used in many rubber compounds, so contributing to reduced swelling in adverse environments, reduced permeability and reduced cost. The higher structure of STERLING NS carbon black results in a better dispersion, higher modulus and lower die swell compared to STERLING NS-1, but requires slightly lower carbon black loadings for the same hardness.

Applications

STERLING NS carbon black finds application in tire compounding in areas where good dynamic performance is needed, with minimal heat generation in flexing, and in areas where high black loading are desirable. Applications include carcass, tube and inner-liner compounds. There is a very wide range of applications for SRF type carbon black in industrial rubber products, particularly in circumstances requiring low viscosity, low modulus, low compression set and good resilience, or in those requiring high black loading.

Examples include gaskets, seals, windscreen wiper blades, engine mountings, hose linings and extruded articles.

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