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**2010
Chemicals & Materials**
Chemically modified precipitated silica
Fumed silica in rubber reinforcement
Use of resol-modified bentonite clay
nanocomposites in CB N660 filled SBR

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FEATURES

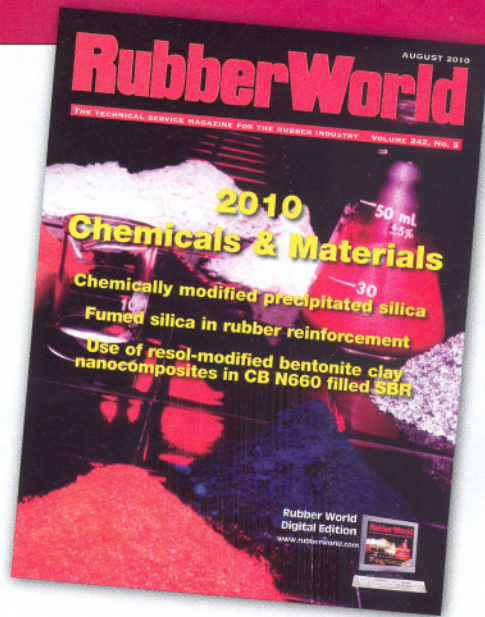
11 Silicone & Medical Update

13 Chemically modified precipitated silica

by Timothy A. Okel, PPG Industries. The quest for a reinforced hydrocarbon polymer compound that will provide improvements in traction, rolling resistance and wear resistance resulted in a chemically modified precipitated silica used in tire production that eliminates production drawbacks and enhances fuel efficiency, safety and environmental performance.

28 Use of resol-modified bentonite clay nanocomposites in CB N660 filled SBR

by Sugata Chakraborty, Saikat Dasgupta and Rabindra Mukhopadhyay, Hari Shankar Singhania Elastomer and Tyre Research Institute; Samar Bandyopadhyay, J.K. Tyre; Mangala Joshi, Indian Institute of Technology; and Suresh C. Ameta, Mohanlal Sukhadia University. Resol-modified bentonite clay nanocomposites are used in carbon black N660 filled styrene butadiene rubber compounds to improve properties at a good cost/performance ratio.



35 The last 100 years of fumed silica in rubber reinforcement

by Orawan Taikum, Rainer Friehmelt and Mario Scholz, Evonik Degussa. Applications of several grades of fumed silica in silicone rubbers and MRG rubbers (HNBR, FKM and BR/SBR/IR blend) are discussed in detail.

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- Expanded literature selection

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