

1. - INTRODUCCIÓ

2. - CARACTERITZACIÓ

3. – INTERACCIÓ CÀRREGA - POLÍMER

4. – INFLUÈNCIA DE LA SUPERFICIE A LA VULCANITZACIÓ

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6.1 – ARTICLES

TIME-OF-FLIGHT SIMS AS A USEFUL TECHNIQUE FOR THE STUDY OF THE INFLUENCE OF CARBON BLACK IN NATURAL RUBBER VULCANIZATION

Borros, S.; Vidal, E.; Agullo, N.; Van Ooij, W. J.

Kautschuk Gummi Kunststoffe, 53(12), 711-715 (2000)

EFFECT OF CBS SURFACE TREATMENT ON ITS REACTIVITY IN RUBBER VULCANIZATION

Vidal, E.; Borros, S.; Agullo, N.; Van Ooij, W. J.

Gummi, Fasern, Kunststoffe, 54(5), 330-333 (2001)

THE ROLE OF CARBON BLACK SURFACE ACTIVITY AND SPECIFIC SURFACE AREA IN THE VULCANIZATION REACTION

N. Tricás, E. Vidal-Escales and S. Borrós

Afinidad, 59(500), 337-342 (2002)

INFLUENCE OF CARBON BLACK SURFACE ACTIVITY ON VULCANIZATION REACTION

Vidal-Escales, E.; Borros, S.

Gummi, Fasern, Kunststoffe, 56(1), 38-41 (2003)

Technical Papers - American Chemical Society, Rubber Division,
Spring Technical Program, 161st, Savannah (2002)

INFLUENCE OF CARBON BLACK AMORPHOUS PHASE CONTENT ON RUBBER FILLED COMPOUNDS

Tricas, N.; Vidal-Escales, E.; Borros, S.; Gerspacher, M.

Composites Science and Technology, 63(8), 1155-1159 (2003)

PLASMA POLYMERIZATION OF SULFUR TO DECREASE THE BLOOMING EFFECT AND ITS EFFECT ON VULCANIZATION WITH DIFFERENT ACCELERATORS

Vidal-Escales, E.; Agullo, N.; Borros, S.; Van Ooij, W. J.

Rubber World, 228(5), 21-25 (2003)

Technical Papers - American Chemical Society, Rubber Division,
Spring Technical Meeting, 163rd, San Francisco, 236-248 (2003)

**NEW METHODOLOGY TO FOLLOW THE
EVOLUTION OF SQUALENE BY-PRODUCTS
DURING MODEL COMPOUND
VULCANIZATION STUDIES**

Vidal-Escales, E.; Borros, S

Talanta, 62(3), 539-547 (2004)

6.2 – PROCEEDINGS

MODEL COMPOUND VULCANIZATION AND IGC AS PREDICTION TOOLS IN CARBON BLACK EFFECT ON VULCANIZATION

Vidal-Escales, E.; Diago, M. P.; Borros, S.

Materials Research Society Symposium Proceedings, 731 (Modeling and Numerical Simulation of Materials Behavior and Evolution), 313-318 (2002)

STRUCTURE-PROPERTY RELATIONSHIP IN CARBON BLACK FILLED NATURAL RUBBER COMPOUNDS

E. Vidal-Escales, M.P. Diago and S. Borrós

Strasbourg E-MRS Meeting Proceedings, Paper reference: N-VI.5
(2002)

INFLUENCE OF PLASMA POLYMERIZED CARBON BLACK IN THE IN-RUBBER PROPERTIES OF FILLED COMPOUNDS

N. Tricás, E. Vidal-Escales, S. Borrós, M.Gerspacher

ISPC Proceedings, Sicilia, 366 (2003)

PLASMA POLYMERIZATION ON POWDERS FOR NEW REINFORCING FILLERS

E. Vidal-Escales, S.K. Lee, S. Borros, W.J. van Ooij

16th International Symposium on Plasma Chemistry Proceedings,
Taormina (Italia), 524 (2003)

SURFACE MODIFICATION OF RUBBER CHEMICALS. NEW APPLICATIONS OF PLASMA POLYMERIZATION

N. Tricás, E. Vidal-Escales, N. Agulló, W. Van Ooij and S. Borrós

SBRC Proceedings, Brazil (2003)

6.3 – PATENT

SURFACE-TREATED ACCELERATOR TO CONTROL REACTIVITY IN VULCANIZATION PROCESSES

Borros Gomez, Salvador; Van Oijj, Win.

Patent ES 2190853 A1 20030816, 15 pp (2003)