

B.F. GOODRICH COMPANY TECHNICAL REPORT 27-41,599

Title Uniroyal TPR-3700		
Author H. E. Dien	Location Brecksville R & D Center	Date Sept. 17, 1975
To: G. Lindsey	Location Brecksville R & D Center	Project No. 7938

Summary

This thermoplastic is based on a blend of PVC and Mycar, and contains antimony trioxide flame retardant.

We analyzed Uniroyal TPR-3700 as follows:

Polymer	50 percent
Plasticizer	35-40 "
Carbon black	5-10 "
Antimony trioxide	5 "

The polymer is a mixture of polyvinyl chloride and a butadiene/acrylonitrile copolymer (Mycar). There appears to be about 70 percent PVC in the mixture. The copolymer has 30 to 35 percent acrylonitrile.

The plasticizer is a non-aromatic polymeric polyester type with a spectrum fairly similar to the spectrum of Helico's MA-5-A plasticizer.

The XRF qual scan (Glencos) data, normalized to Cl (highest concentration) were:

Cl	highest
Sb	very high
Sn	moderate
Pb	low to moderate
Ca, K, S	low
Fe	very low
Zn	uncertain

This suggests that a mixture of tin mercaptide and lead compounds are present as PVC stabilizers.

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Log Book Reference:

L.B. 313-85, 86, 89

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