



strength, tear strength, flex cracking rate and strain energy show no direct correlation with abrasion resistance but high values of these properties are believed to be desirable for the rubber to exhibit high abrasion resistance.

For filled-natural rubber, adhesion between rubber and filler appears to be very important for the rubber to exhibit high abrasion resistance.

Blockcopolymers of butadiene and isoprene of molecular weight among 14000 and 62000 could not help improve the abrasion resistance of unfilled natural rubber/butadiene rubber blends though compatibilisation of the two rubbers as intended. For carbon black-filled natural rubber/butadiene rubber blends, blockcopolymers could improve the abrasion resistance to the amount depending on the level of carbon black loaded. For 30 phr the improvement was 30-44% and for 50 phr the improvement was 11-25%. For compounding study of shoe-sole formulation, the type of natural rubber (crepe and TTR5L) and DEG were found to affect abrasion properties.