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СИНТЕЗ И ПЕРЕРАБОТКА ПОЛИМЕРОВ И КОМПОЗИТОВ НА ИХ ОСНОВЕ

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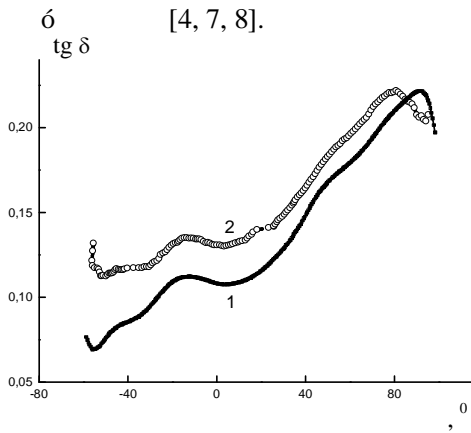
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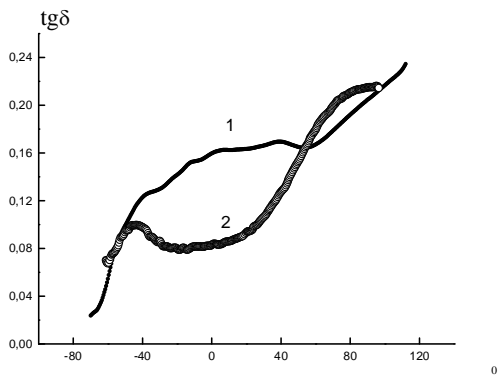
$$\text{tg}\delta = f(\alpha)$$

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-		131	181	64
:	= 60 : 40	128	166	59
:	= 60 : 40	127	165	59

		2.	
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1. // . 2001. . 70. 1. . 72687. 6
2. . 2004. 160 .
3. . 2011. 720 .
4. . 2. 6 .
5. Nakason C., Nuansomsri K., Kaesaman A., Kiatkamjornwong S. Dynamic vulcanization of natural rubber/high-density polyethylene blends: Effect of compatibilization, blen ratio and curin system // Polymer Testing. 2006. V. 25. P. 7826796.
6. // . 2003. . 45. 12. . 203262039.
7. // . 2010. 3. . 8611.
8. // . 2011. 7. . 9612.
9. George S., Neelakantan N.R., Varughese K.T., Thomas S. Dynamic mechanical properties of isotactic Polypropylene/nitrile rubber Blends: effect of Blend ratio, reactive compatibilization and Dynamic vulcanization // J. Polymer Sci. Part B. Polymer Phys. 1997. V. 35. P. 230962327.
10. // . 2009. . 51. 2. . 2756285.
11. / . 1995. 528 .
12. // . 2008.
13. . 50. 6. . 99861008.

THE STRUCTURE AND THE PROPERTIES OF DYNAMIC THERMOPLASTIC ELASTOMERS BASED ON POLYETHYLENE AND ETHYLENE-PROPYLENE-DIENE RUBBER

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Composites based on LDP, HDP and oil-extended EPDM were investigated. It is shown that the matrix polymer predetermines the depth of completion of phase segregation and the structure of dynamic thermoplastics formed by reactionary blending during dynamic vulcanization of the thermoplastic-rubber blend.

Key words: *polymer blends, dynamic vulcanization, phase structure.*