TITLE	EFFECT OF MIXING CONDITIONS ON PHASE MORPHOLOGY OF NR/EPDM BLENDS
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ABSTRACT A number of mixing parameters including mixing temperature, rotor speed, fill factor, mixing time, and loading sequence have strong influences on mixing quality. In this work, an inhouse developed co-rotating batch mixer equipped with the MX2 rotors, which providing a combination of shear and extensional flows, was used to prepare NR/EPDM blends under various mixing temperatures, rotor speeds, and mixing times. Phase morphology and magnitude of coefficient of dispersive mixing (CDM) were used as qualitative and quantitative determination of mixing quality, respectively. It was found that the lower the mixing temperature, the greater the mixing quality would be obtained. The optimum rotor speed was observed at 60 rpm which was probably caused by the counter-balancing effect of shear stress and shear heating.