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# Desorption Kinetics of Volatile in Condensed Mode PolyethyleneProcess

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摘要 In this paper the desorption kinetics of volatile in condensed modepolyethylene process is
studied through experiments. It is found thatthough the residual volatile in particles at the later stage of desorptionaccounts for a relatively small portion of the total quantity, the desorptionof this part of volatile requires much longer time than at the earlier stage.For high requirement of devolatilization, the total time needed will bepredominately determined by the residual amount of volatilein particles. Temperature has greater effect on the desorption rate thanother influence factors, especially in the later period of desorption.A model is proposed to calculate the volatile desorption rate for condensedmode polyethylene process.

关键词 desorption model mass transfer rate polyethylene

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**Key words** desorption model; mass transfer rate; polyethylene

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