

Single-side superhydrophobicity in Si₃N₄-doped and SiO₂-treated polypropylene nonwoven webs with antibacterial activity and good performances

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Melt flow rate measurement

The flow performance of electret masterbatch was tested by a melt flow rate meter (XNR-400a, Jinhe, China). The test method was according to GB/T 3682-2000, the test temperature was 230°C and the nominal load was 2.16kg.

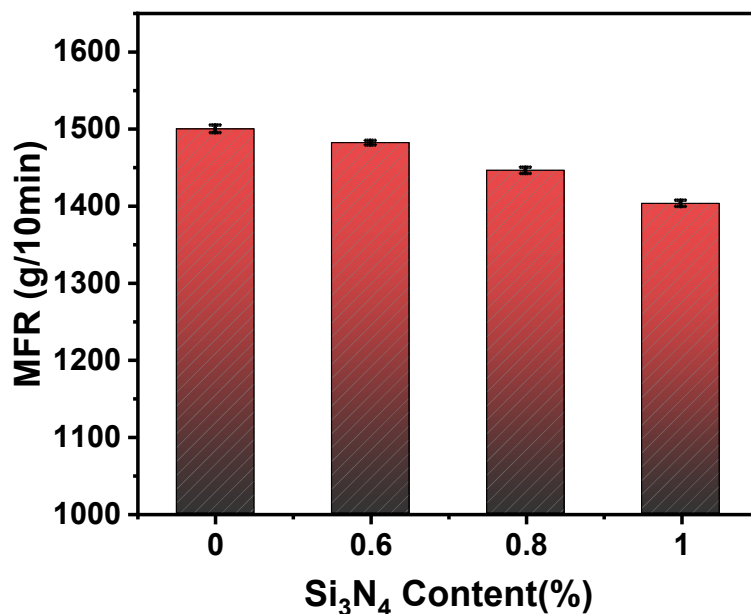


Figure.S1 Flow rates of masterbatch melt with different Si₃N₄ contents

As shown in Figure.S1, with the increase of silicon nitride content, the flowability of PP becomes worse, decreasing from 1500 g/1000 min to 1403 g/10 min. The addition of silicon nitride increases the viscosity of the PP system, and the flow performance deteriorates.