

Title: The preparation method and performance analysis of coated kraft paper with wear resistance

Abstract: The goal of the research is to improve the surface states of kraft paper and to make coated kraft paper with wear resistance suitable for packaging material. Based on wear and coating mechanism, the research analyzed and compared the characteristics and microstructure of uncoated paper and coated paper. The result shows that coating can reduce the surface resistance and friction of paper. Kraft paper was coated with the VaporCoat™2200.s coating in the research. The research studied the influence of coating process on wear resistance of coated kraft paper. Two hundred groups of experimental datum of each sample show that the optimal coating weight is 18g/m². As expected, coated kraft paper has better wear resistance and other performance than the uncoated kraft paper. The results show that the coating technology is an inexpensive and environmentally friendly process. The research provides the theoretical basis and data supporting for packaging enterprises to produce the coated paper-based packaging materials with wear resistance.