

ACI-ST (Activated Carbon for Inkjet Ink from Scrap Tire)

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ABSTRACT

Waste becomes one of the unresolved problems in society. One of the abundant types of waste is scrap tires. The high level of used tires in the community requires creative and innovative ways of managing alternatives into efficient products. An attempt was conducted to use used tires as pigments for printer ink. The production of color pigments was prepared by crushing scrap tires to form a homogeneous carbon powder that is burning used tires in low oxygen conditions which is then chemically activated and mixed with other ink-making materials. From the inks produced, the color coordinate testing was done with the colorimeter application and ImageJ. Based on the test results, the mean gray value shown is lower than 36.7. This value shows that the ink that has been produced is still different from the standard ink. The results of used tire ink show a smaller L value, which means that the resulting ink is getting darker.

Keywords: Ink; used tires; pigments