A STUDY THE PHYSICAL PROPERTIES OF WHITE RICE HUSK ASH- FILLED NATURAL RUBBER COMPOUNDS

By

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ABSTRACT

This thesis details the potential use of white rice husk ash (WRHA), which usually contains around 96%(w/w), silica as filler in natural rubber compounds. The loading levels of WRHA with deferent composition with natural rubber have been studied. The level with optimum physical properties was found to be as 10 phr loading and deterioration of properties were observed with further increase of loading levels of WRHA.

How ever, it was feel that WRHA could be used as cost effective filler with modification to surface characteristics. Incorporation of silane type coupling agent (A 1289) has resulted in improving the curing characteristics as well as physical properties of WRHA filled natural rubber compound.

The natural rubber compound containing 30 phr of WRHA and 0.5phr of A1289 showed higher physical properties indicating between the improved interaction between WRHA and the natural rubber phasae.

CONTENTS

CHAPTER 03 – RESULTS AND DISCUSSION