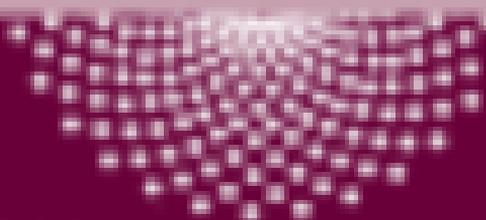


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Dani Permana, Desi Rosdianti, Safri Ishmayana, Saadah D. Rachman, ... Hari Rom Hariyadi

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Devi Indah Anwar, Dikdik Mulyadi

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Euis Julaha, Yunita Permatasari, Tri Mayanti, Ajeng Diantini

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Rani Maharani, Eka Fitri Yanti, M.Devia Irma Melati, Daniel Sihotang

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Reni Banowati Istiningrum, Christny Desiree Tiwow, Nuryono, Narsito

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Safri Ishmayana, Ursula J. Kennedy, Robert P. Learmonth
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Shabarni Gaffar, Dani Permana, Dessy Natalia, Toto Subroto, Soetijoso Soemitro
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Sri Priatni
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Pages 200-206
Tiny Agustini Koesmawati, B. Buchari, Aminudin Sulaeman, Slamet Ibrahim
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The Use of DPNR to Produce Technology Process of Sponge for Floating Hose

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Abstract

Indonesia is a second largest rubber-producing countries in the world with production of 3.18 million tons in 2013, after Thailand, and has a land area of the world's largest rubber plantation with an area of 3.56 million hectares in 2013. So the rubber and rubber goods are commodities that are very important and influential on the national economy. One of widely used product of the rubber is a sponge for floating media. The sponge is made of not only synthetic rubber, but also natural rubber. In this research, DPNR was used as a raw material rubber to produce sponge of floating hose. The results showed that sponges are made of DPNR3 has a density of 0.1890 g/cm³, compression set at room temperature of 8.08%, and 19.11% at a temperature of 70 °C, while the original (DPNR1) has a density of 0.3018 g/cm³, 25.33% of compression set at room temperature, and 27.30% at a temperature of 70 °C. DPNR3 rubber can be used as raw material for the manufacture of sponges because the sponges which are obtained meet the technical specification requirements.

Keywords: Compression set, DPNR, Density, Sponge

1. Introduction

Indonesia is a second largest rubber-producing countries in the world with production of 3.18 million tons in 2013, after Thailand, and has a land area of the world's largest rubber plantation with an area of 3.56 million hectares in 2013. So the rubber and rubber goods are commodities that are very important and influential on the national economy¹.

In accordance with the development of technology, industrial rubber goods requires improved properties of natural rubber as a raw material, such as a low protein content. The trend of consumer demand for a variety of natural rubber in the market, and for the purposes of making a specific rubber goods are not only have to meet some

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