

An innovation of the palm oil based wax as industrial wax for machining prototype sustainable products

Abstract

Petroleum based wax are used in industries to produce prototype models in machining, educational and training purposes by many types of industries. However the paraffin type of wax is very expensive. Hence an effort was taken to produce palm oil based wax in the way to substitute paraffin wax to an affordable material that will give great savings in cost and time in prototype manufacturing. Palm oil unique composition makes it versatile in any applications such as food manufacturing, health products, cosmetics as well as pharmaceutical industries. Its technical properties make it as preferable as base components in any manufacturing products. With the sustainable ability to recycle the used prototype parts, industries may be able to produce low cost product verification since the palm oil based wax can be reformed to its original structure properties after heating and melting process.

Keywords; Industrial wax; Machining; Palm oil wax; Prototype