

SIFAT-SIFAT KOPAL MANILA DARI PROBOLINGGO,
JAWA TIMUR

Properties of Manila Copal Originated from Probolinggo, East Java

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ABSTRACT Manila copal is originated from the exudate of *Agathis* sp. trees, which flows out through the tapping stimulation. Manila copal from Indonesia nowadays prevails nearly 80-percent share in the world market. One of the potential regions that produce manila copal in Indonesia is situated in Probolinggo, East Java. The manila copal as such reveals particular physical and chemical properties and then is categorized as superior (UT) and primary (P) qualities, exemplified consecutively: color magnitudes at 10 YR 8/3 (light gray) and 2.5 YR 6/1 (reddish gray), impurities 9.7 percent and 23.3 percent, softening point 144°C and 149°C, ash content 0.2 percent and 9.2 percent, acid number 244 and 209, saponification number 309 and 245, and specific gravity 0.91 and 0.88, respectively. The qualities of Manila copal from Probolinggo is poor in qualities and could not meet Indonesian National Standard, particularly due to high impurities.

Keywords: Manila copal, *Agathis* sp., physical and chemical properties

ABSTRAK

Kopal manila berasal dari getah pohon *Agathis* sp., yang keluar dengan cara disadap. Kopal manila dari Indonesia menguasai hampir 80% pasar dunia. Salah satu daerah penghasil kopal manila di Indonesia yaitu Probolinggo, Jawa Timur. Sifat-sifat fisiko-kimia kopal manila Probolinggo kualitas UT/Utama dan P/Pertama adalah sebagai berikut : warna 10 YR 8/3 (abu-abu muda) dan 2,5 YR 6/1 (abu-abu kemerahan); kadar kotoran 9,7% dan 23,3%; titik lunak 144 °C dan 149 °C; kadar abu 0,2% dan 9,2%; bilangan asam 244 dan 209; bilangan penyabunan 309 dan 245 dan berat jenis 0,91 dan 0,88. Kopal manila Probolinggo kualitasnya relatif rendah dan tidak termasuk dalam Standar Nasional Indonesia 01 - 1681 - 1989, terutama disebabkan oleh kadar kotoran yang tinggi.

Kata kunci: Kopal manila, *Agathis* sp., sifat fisiko-kimia