

Formaldehyde Content, Extraction and Emission on Leather

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Abstract: In the determination of formaldehyde content by means of steam distillation, the samples must be ground owing to the need of enough time to dissolve into water from leathers. Formaldehyde emission seems to happen at the grinding of leathers, the steam distillation was performed as soon as the leather sample is ground. The analysis of formaldehyde by means of spectrophotometer and the steam distillation must be performed within the same day when the sample is pulverized.

In the range of these experiments, the leathers with under 600 mg/kg formaldehyde content were satisfied with Japan Eco-leather Standard (less than 75 mg/kg free formaldehyde). However it is difficult that the leathers with over 1,300 mg/kg formaldehyde content were not satisfied with Japan Eco-leather Standard. As formaldehyde emission from leathers was determined by the standard of the wall paper and wall coverings and compared with that standard (0.2 mg/L), the values in half of six samples were below that standard. In order to judge whether the value of formaldehyde emission from leathers is high or not, the used volume and the characteristics of leathers must be considered in the used environment.

Key words: formaldehyde content; formaldehyde emission; free formaldehyde; leather