

ALIEN PROPERTY CUSTODIAN

PROCESS FOR THE PREPARATION OF POLISHING WAX

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This invention deals with an improvement in floor waxes, and more particularly relates to a water-free floor wax composition giving a glossy covering which is not slippery.

Floor wax compositions which are free from water normally consist essentially of paraffin and natural waxes, ozokerite, and a suitable solvent. Suitable waxes are in particular ceresin or mixtures thereof with natural waxes such as beeswax, which mixtures contain a predominating amount of paraffin wax. Ozokerites or similar substances are used in mixtures of this type because they inhibit the crystallization of the wax, thereby making the mixtures smooth. The usefulness of ozokerites in floor waxes is, as a matter of fact, judged by their ability effectively to inhibit crystallization.

Frequently, in addition to the above components, small amounts of resins are added to improve the homogeneity of the resulting mixture. However, floor waxes containing substantial amounts of resins yield floor coverings of considerable stickiness. Moreover, the melting point of the mixture is usually considerably depressed so that it may be necessary to add additional amounts of high melting ceresins, thereby increasing the tendency to form a granular product.

It has now been found that floor waxes of a high degree of smoothness can be produced if the ozokerite is substituted by a highly viscous mineral oil to which has been added a small amount of an oil-soluble resin. Suitable resins are, for example, the formaldehyde-phenol condensation products. About 3% to 15% of the resin may be added to the mineral oil, and a preferred ratio of resin to mineral oil is about 5:95.

Any mineral oil having a viscosity above 2° Engler at 100°C is suitable, whether it be a raffinate, extract, distillate, etc., provided it is substantially free from tarry material. In floor waxes containing the mineral oil-resin solution, the role of this solution is primarily that of ho-

mogenizing and reducing the tendency of the wax to crystallize. When brushed on the floor, the surface of the wax is glossy and smooth. The small amounts of resins prevent its being slippery, and it has the advantage over similar mixtures containing ozokerite of not being sticky.

Because of the peculiar structure of mineral oils, the floor wax produced according to my invention produces a very tough coating which is superior in all respects to similar coatings containing ozokerite.

The ratio between paraffin wax, e. g., ceresin, and the resin-in-oil solution may vary within fairly wide limits, which to some extent depend upon the melting point of the paraffin as well as its tendency to crystallize. In general, about 2% to 10% of the resin-in-oil solution is added to the paraffin, and the resulting mixture may be combined with a suitable solvent, such as kerosene, to reduce it to a consistency suitable for applying it with a brush.

Example

The following components were melted in a conventional grease kettle: 300 kg. of mixed waxes consisting of 250 kg. paraffin (melting point 52°C) plus 50 kg. beeswax. Into the melted wax, 10 kg. of a solution of 5 parts of phenol-formaldehyde condensation product in 95 parts mineral oil having a viscosity of 4° Engler at 100°C, were added. After thoroughly mixing the components, about 700 to 1000 kg. of a conventional solvent was incorporated.

The resulting product was a smooth floor wax having excellent qualities. When applied to the floor with a brush, it gave a glossy covering which was smooth, but was neither slippery nor sticky. It was hard enough not to give imprints when stepped upon. It remained satisfactory even on the hottest summer day. Moreover, it was very economical when applied to the floor surface with a brush.

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