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EVAPORATIVE MARKING COMPOSITION

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3 Claims. (Cl. 106—19)

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This invention relates to marking compositions and, particularly, to devices for producing markings intended to be of a more or less temporary nature. More particularly, the invention relates to devices adapted for the marking of fabrics and articles of apparel in the manner normally practiced by tailors in the cutting, fitting and altering of garments.

It has long been the practice to employ in the marking of fabrics and apparel a so-called tailor's chalk having a wax base. While chalk of this type produces a clear and legible marking on most fabrics which can generally be removed without difficulty after it has served its purpose, it has been found that, with some of the newer type fabrics, particularly the smooth and closely woven light-weight type fabrics, such as gabardines and hard worsteds, it is extremely difficult to remove alteration and lay-out markings made with the regular type wax crayons. Even after steam pressing, the wax crayon markings on fabrics of the type above mentioned tend to leave stains which are very difficult to remove.

An object of the present invention is to provide an improved type of marking device, particularly adapted for use as a tailor's chalk which produces a distinct and legible marking on all types of fabric, a further object being to provide a device of the character described which produces a marking on fabrics of all types that can be completely removed without leaving any trace or stain by a simple steam pressing operation. A still further object of the invention is to provide a device of the character described for producing markings on fabrics which will disappear after predetermined time intervals under ordinary atmospheric conditions, without leaving any trace or stain.

Regarded in certain of its broader aspects, the novel device, according to the present invention, comprises an opaque fused body of material melting between about 100° and 200° C. and, further, characterized as subject to slow sublimation under atmospheric conditions, whereby a mark produced by the device will evaporate in a predetermined period of time and disappear under atmospheric conditions.

Numerous organic chemical compounds, particularly acidic aromatic compounds can be employed either separately or in combination, in the marking device, the particular material or combination of materials employed depending upon the intended use of the device and the time duration desired in a mark produced by the device. In marking devices particularly adapted for use as tailor's chalk, it has been found that a fused body comprising predominately salicylic acid gives superior results. In addition to salicylic acid, minor proportions of benzoic acid or benzoic acid and phthalic anhydride can be included. If desired, a small amount of perfume oil may also be added to impart a pleasing odor to the fused body.

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The particular shape and contour of the used body will, of course, depend upon the intended use of the marking device. When the device is intended for use as a tailor's chalk, the fused body is preferably fashioned in the usual substantially flat rectangular contour, having opposed sides tapered to form marking edges.

In preparing my new marking devices, the amounts of salicylic and benzoic acids employed are varied in accordance with the time duration desired in a mark made by the device under normal atmospheric conditions. If, for example, the device is made-up to contain predominately benzoic acid, a mark produced by the device will disappear by sublimation under normal atmospheric conditions in a period of about two days. If, on the other hand, the device is made-up predominately of salicylic acid, the time required for a mark produced by the device to disappear under ordinary atmospheric conditions is approximately five days. This somewhat longer lasting mark is preferred in most instances, particularly where the device is to be used in marking garments for alteration purposes. It will be understood, however, that either the long duration or short duration mark can be completely removed instantaneously by merely steam pressing the marked area of a fabric. In this instance, the steam pressing accelerates many fold the sublimation process which otherwise takes place slowly under atmospheric conditions.

Phthalic anhydride is preferably employed in a relatively small proportion as it provides a somewhat softer fused body and, hence, a better marking edge than does a body comprising only benzoic and salicylic acids. In small amounts the phthalic anhydride has little effect on the lasting time of a mark produced by the device, although as the amount of phthalic anhydride is increased in a fused body comprising predominately salicylic acid, there is a tendency to somewhat shorten the time interval for a mark to disappear.

Preferred forms of my marking device, i. e., those producing marks which last approximately five days under normal atmospheric conditions contain about 84.5–90% of salicylic acid, approx-

imately 10% of benzoic acid, and phthalic anhydride, if present, in the amount of about 5%. The amount of perfume oil required to impart a pleasing scent to the device is approximately 0.5%.

The various components are fused together in a suitable vessel at a temperature of about 325° F., the temperature being held at this point for approximately twenty-five minutes. The mixture is then allowed to cool to about 300° F. The fused mixture is then transferred by suitable means, such as pouring or extruding into suitable shaping moulds to produce marking devices of predetermined desired shape and contour. Upon cooling, the finished marking devices are of uniform and homogenous composition.

The following examples show preferred adaptations of my invention, but it is to be understood that these examples are given primarily by way of illustration and not of limitation.

Example I

A mixture of 89.5% salicylic acid, 10% benzoic acid and 0.5% of perfume oil G. D. 4100 is placed in a steel electric kettle and covered. The temperature is then run up to 325° F. and held for twenty-five minutes. The temperature is then lowered to 300° F. and held at this temperature while the entire mass is poured into small iron shaping moulds. Upon cooling, the marking devices, thus obtained, produce markings on fabric which, under normal atmospheric conditions, completely evaporate without leaving any trace or mark in a period of approximately one hundred twenty hours.

Example II

A mixture of 84.5% salicylic acid, 10% benzoic acid, 5% phthalic anhydride and 0.5% perfume oil G. D. 4100 is placed in a steel electric kettle and fused and poured into moulds as described in Example I. The marking devices thus obtained produce a mark on fabric which completely disappears without leaving any trace or stain in a period of about one hundred twenty hours. Marks produced by these devices, however, are somewhat more clear and legible due to the somewhat softer marking edge provided in the device by virtue of the phthalic anhydride present.

While my improved marking device is intended primarily for use as an improved tailor's chalk for marking all types of fabrics and apparel, it is

understood that the device is adapted for many other uses, where a temporary and non-staining mark is desired. In the various adaptations of the device, it will further be apparent that any desired shape or contour can be imported to the device which provides the necessary marking edge or point.

Various changes and modifications in the device herein described will occur to those skilled in the art and to the extent that such changes and modifications fall within the purview of the appended claims it is to be known that they constitute part of the present invention.

I claim:

1. A tailor's marking composition comprising an opaque solid body obtained by fusing together a mixture of aromatic compounds consisting of 84.5–90% salicylic acid, about 10% benzoic acid, 0–5% phthalic anhydride and 0–0.5% perfume oil, said body being characterized as subject to slow sublimation under atmospheric conditions, whereby a mark produced therewith will evaporate and disappear in a period of about two to five days under atmospheric conditions.

2. A composition for the temporary marking of textile materials obtained by fusing together about 89.5% of salicylic acid, 10% of benzoic acid and 0.5% of perfume oil.

3. A composition for the temporary marking of textile materials obtained by fusing together about 84.5% of salicylic acid, 10% of benzoic acid, 5% of phthalic anhydride and 0.5% of perfume oil.

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