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NONSETTLING PUTTY

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6 Claims. (Cl. 106—253)

This invention relates to that type of plastic which is commonly called putty.

Putty, as it is generally known, is made of a mixture of a filler, such as whiting, and oil, the oil usually being linseed or of a mixture of linseed and some other type of oil, such as mineral oil. This common type of putty is suitable for use when first mixed but after being allowed to stand for any length of time, the whiting will settle out of the oil and the putty must be mixed again to the proper consistency before it may be applied. In the case of putty which is sold to the individual consumers it often happens that they do not realize that the putty should be mixed thoroughly before used and consequently unsatisfactory results will be had. It is also true in commercial work, that if a large quantity of putty is purchased and stored for some time because of delay or other reasons, the enormous task of mixing the putty which has settled out adds greatly to the cost.

An object of the present invention is to provide a putty which will not settle out or separate upon standing over long periods of time. The advantages of such a putty are obvious. It is a further object of the invention to provide a putty which, when applied, will not separate readily into its various ingredients, thus permitting the oil to oxidize too rapidly.

The objects of the invention are accomplished by mixing with the usual whiting and oil a metallic soap such as aluminum resinate. Other metallic soaps are formed as palmitates, oleates and stearates. Other metals that can be satisfactorily used to form the metallic soap are calcium, barium, magnesium, iron and zinc. From a theoretical point of view, any of the metals in the electromotive series from potassium to iron may be used to form the soaps though as a matter of practice, the cost of some of these metals would prohibit their use.

It is impossible, however, to mix metallic soap in any proportion with a putty and get satisfactory results. I have found that it is preferable that the metallic soaps have a ratio of 3 to 14 by weight with the oil used in the putty. In other words, if there are 14 pounds of oil used in a certain quantity of putty, there should be 3 pounds of metallic soap. I have found that a ratio of 2 to 14 is unsatisfactory. A ratio of 4 to 14 will work satisfactorily and a higher ratio will also be suitable except that it increases the cost. It is also possible to put in too much metallic soap so that the putty is not suitable.

The quality of a putty depends largely on the percentage of linseed oil in the oil used in mixing the putty. An example of high quality putty would be a putty formed as follows:

	Pounds
Whiting	86
Pure linseed oil	14

If there is mixed with this type of putty, 3 pounds of a metallic soap of the type described, the putty will be a non-settling putty which will remain in its mixed form indefinitely.

In a cheaper putty the same ratio of metallic soap to oil is maintained:

	Pounds
Whiting	86
Mineral oil	7
Linseed oil	7
Metallic soap	3

A third example of a still cheaper putty is:

	Pounds
Whiting	86
Mineral oil	10
Linseed oil	4
Metallic soap	3

In mixing the putties it is best to mix the metallic soap with the oil before it is put in the whiting.

What I claim is:

1. A non-settling putty comprising a mixture of whiting, linseed oil and metallic soap formed of metals ranging in the electromotive series from iron to potassium, the oil and metallic soap being present in the mixture at a ratio by weight of 14 and 3 to 5.

2. A non-settling putty comprising a mixture of whiting, linseed oil and aluminum resinate, the latter being present in the mixture at a ratio of approximately 3 to 14 by weight with the oil.

3. A non-settling putty comprising a mixture of whiting, linseed oil and a metallic soap formed of metals ranging in the electromotive series from iron to potassium, the soap being present in the mixture at a ratio of approximately 3 to 14 by weight with the oil.

4. A non-settling putty comprising a mixture of whiting, linseed oil and a metallic soap formed of metals ranging in the electromotive series from iron to potassium, said metallic soap being selected from the group consisting of stearates, oleates, palmitates, and resinates, the soap being present in the mixture at a ratio of approximately 1 to 5 or greater by weight with the oil.

5. A non-settling putty comprising a mixture of whiting, linseed oil, mineral oil, and metallic soap formed of metals ranging in the electromotive series from iron to potassium, the soap being present in the mixture at a ratio of approximately 3 to 14 by weight with the oil.

6. A non-settling putty comprising a mixture of whiting, linseed oil, mineral oil, and aluminum resinate, the latter being present in the mixture at a ratio of approximately 3 to 14 by weight with the oil.

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