United States Patent Office

2,838,414

Patented June 10, 1958

2,838,414

PROTECTIVE COATING COMPOSITION

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No Drawing. Application June 18, 1956
Serial No. 591,788

1 Claim. (Cl. 106—282)

This invention relates to compositions for coatings or thick paint particularly adapted for application to roofs and other metal structures.

It is an object of our invention to provide an economical roof coating composition which will be highly durable, may be readily applied, will not sag and will not crack or soften under varying weather conditions.

Another object is the provision of a coating or paint compositon well adapted for filling in worn or corroded roofs or other metal surfaces and for preventing further corrosion or roofs rusting and equally well adapted for a new roofing or other surface over metal or wood.

Another object is the provision of a highly efficient roof coating of the class described which has high elasticity, will not crack or run and which has high reflective value, thereby serving to prevent penetration of heat rays.

With our improved composition, certain of the ingredients are quite essential while at least two of the preferred ingredients may be dispensed with without detracting substantially from the overall results.

Our preferred compositon comprises an intimate admixture of the following ingredients in general accordance with the proportions stated although these proportions may be varied reasonably without departing from the scope of our invention, to wit:

Coal tar	gal.	50
Powdered aluminum (natural or colored)	pounds	7
Ground asbestos	do	10
Lead oxide	do	8
Gypsum	do	8
Pulverized rosin	do	6
Zinc sulphate	do	2

The pulverized rosin may be reduced in quantity or eliminated as well as the zinc sulphate, with nevertheless very good results on the composition formed.

To prepare the composition, the powdered aluminum, the ground asbestos, lead oxide, gypsum, rosin and zinc sulphate are intimately mixed and incorporated in the relatively large amount of coal tar. The admixing of these ingredients is preferably facilitated by addition to the mixture of a suitable proportion of a mixture of gasoline and kerosene in equal parts. In preparing our composition it is not necessary to heat the tar as thinning is brought about by the mixture of gasoline and kerosene. Thus, the labor and critical factors of boiling or heating tar is eliminated in the preparation of our composition. It will of course be understood that agitating and mixing means of mechanical nature are preferably employed to obtain a very thorough admixture of all the essential ingredients.

The composition may be thinned to fluid state or when a thicker coating is desired, be brought to a semi-fluid state where it may be readily applied and flowed during application and prior to hardening.

In the application of the composition to worn or new roofs or to metal surfaces, the brushing or smoothing of the composition over the surface, causes the heavier powdered aluminum to rise to the top of the surface, presenting very ornate appearance and if desired, color at the top of the coating. The presence of myriads of minute aluminum particles offers a highly reflective surface to the sun which of course materially cools the roof of the building by reflection of the heat rays.

Our improved composition has excellent bonding characteristics making it possible to utilize layers of the paint or composition between successive layers of felting on roof construction. To the best of our knowledge, this is impossible with prior art compositions.

The ingredients tar, powdered aluminum, asbestos and lead oxide and gypsum, closely cooperate to provide a composition readily handled while nevertheless, running or free flowing of the material is prevented by the cooperation of the quick-drying gypsum with the ground asbestos and tar. The cooperation of the asbestos with the powdered aluminum and tar prevents sagging of the finished roofing coating in hot weather. The composition has a high elasticity and will not crack during marked temperature changes through winter and summer weather.

The composition is particularly well adapted for coating old worn roofs where metal has partially corroded or other roofing material has been worn away. It is also excellent for use in metal gutters. The composition is of such elasticity that on sheet metal, that metal may be deformed and even twisted without cracking of the composition thereon.

From the foregoing, it will be seen that we have produced a new and highly efficient coating composition for roofs, metal and other surfaces adapted to prevent corrosion or rusting of the metals and to provide a hard and highly reflective surface.

It will of course be understood that various changes in the precise proportions of the ingredients may be made, all within the scope of our invention.

What is claimed is:

A protective composition for roofs, metal surfaces and the like, in which are included as essential ingredients and in intimate admixtures, coal tar, powdered aluminum, ground asbestos, gypsum and lead oxide in approximately the proportions of coal tar 50 gallons, powdered aluminum 7 pounds, ground asbestos 10 pounds, gypsum 8 pounds and lead oxide 8 pounds, the coal tar being thinned and the mixture liquefied by the addition of gasoline and kerosene.

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