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METAL CLEANING COMPOSITION

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1 Claim. (Cl. 252—99)

This invention relates to a composition and process for cleaning metal and metal alloys of plaster, grease, oil, dirt and other foreign matter, preparatory to painting.

In new metal buildings and in the reconstruction of old metal buildings, wherein the metal has been previously oiled or greased, it is necessary to remove the brown coat, plaster, lime, grease, oil, oxide films and other foreign matter on the surface of the metal before painting such surface. It is now quite generally agreed that in the painting of metal and metal alloys, the foreign matter on the surface such as plaster, lime, grease and the like plays an extremely important part in determining the quality of the coat of paint. One authority has stated that it appears that at least 75% of the troubles experienced with painting metal surfaces can be attributed to improper surface treatment.

Various methods, both chemical and mechanical, have been employed for removing the plaster, lime and the like from metal surfaces preparatory to painting. Each, however, leaves much to be desired.

The problem of removing plaster, lime and the like from metal surfaces involves application to the plaster, lime and the like of a material which on the one hand will be reactive in dissolving such plaster, lime and the like, and on the other hand be ineffective to attack, pit or etch the metal surface having the plaster or lime thereon, and contain no noxious or dangerous fumes and no components which are dangerous to handle.

My preferred composition is a mixture of 32.4% (the percentages herein given being by weight) potassium sodium tartrate; 20.2% sodium sulphate; 5.6% potassium bitartrate; 10.4% sodium perborate; 4.5% sodium bicarbonate; 24.1% sodium-N-methyl-N-oleoyl taurate; and 2.8% sodium hypochlorite.

In preparing the composition or admixture, I first mix potassium sodium tartrate and sodium sulphate, add

one volume of water to two volumes of powder and leave fifteen minutes. The potassium bitartrate and sodium perborate in the proportions indicated are then added to the mixture and the mixture is left thirty minutes. The sodium bicarbonate and sodium-N-methyl-N-oleoyl taurate are then added to the mixture and to the mixture one volume of water is added. After twenty-four hours, the product is diluted at room temperature.

The composition may be applied to the metal surfaces to be cleaned in various ways, such as by a brush, a gun or other available apparatus.

Experience has proven that metal surfaces cleaned with this composition have been found to be suitable for painting immediately after cleaning.

While I have described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise ingredients herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A metal cleaner composition for removing plaster and lime from metal surfaces, consisting essentially of by weight 32.4% potassium sodium tartrate; 20.2% sodium sulphate; 5.6% potassium bitartrate; 10.4% sodium perborate; 4.5% sodium bicarbonate; 24.1% sodium-N-methyl-N-oleoyl taurate; 2.8% sodium hypochlorite and water.

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