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ROBERT R. VALLEE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE SHARPLES SOLVENTS CORPORATION, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF DELAWARE

METHOD AND COMPOSITION FOR TAR REMOVAL

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This invention relates to a method and to a composition for removal of tar, and particularly road tar, from articles contaminated thereby, and particularly road vehicles.

Present day road construction involves the extensive use of tar as a road material or as a binder for mineral constituents or as a filler for joints between concrete sections or between tracks and other parts of the road. Such road tars include vegetable pitches, mineral pitches and tars, resinous bitumen, and asphalt or asphaltic substances. Such road tars are usually black or dark brown compounds of hydrogen and carbon sometimes containing oxygen and other elements and having varying melting points and varying degrees of hardness. The expression "road tar" is used herein including all such substances which are used in road construction. When such substances are applied to roads in a softened condition, due to heat or solvent, and in hot weather, they are thrown by the wheels of vehicles onto the bodies and running gears thereof, and many other articles including clothing, vehicle tops and upholstery thereby become contaminated with road tar.

Substances have been proposed heretofore for the removal of road tar from articles contaminated thereby, but such substances are either lacking in solvent power for the tar or they evaporate before they are capable of effecting the removal of the tar, or they are incapable of sufficiently dissolving the tar, or they injure to varying degrees the contaminated articles, particularly the lacquer or varnish or paint with which vehicles are finished.

I have discovered that amylene dichloride will effectively and rapidly remove road tar from articles contaminated thereby, without injury to the article and particularly without injury to any of the finishes commonly applied to road vehicles. In accordance with this invention a relatively small amount of amylene dichloride is applied to the tar as by sopping the amylene dichloride onto the tar by means of a cloth or similar article saturated therewith. After allowing the amylene dichloride to remain on the tar for a few minutes the tar may be wiped from surfaces to which it is adhering, or may be washed from articles, such as cloth which may have absorbed the tar, by a further application of the amylene dichloride. The time necessary for a sufficient softening of the road tar by the amylene dichloride is readily determined by observing the effect of the amylene dichloride upon the tar; and in some instances it may be necessary to repeat the treatment of the tar with the amylene dichloride.

Amylene dichloride which is entirely suitable for the purposes of this invention is a commercially available mixture of the following amylene dichlorides:

$CH_3Cl.CHCl.CH_2.CH_2.CH_3$

$CH_3.CHCl.CHCl.CH_2.CH_3$

$\begin{matrix} CH_3 \\ CH_3 \end{matrix}\!\!>\!CCl.CHCl.CH_3$

Such a mixture of amylene dichlorides has a specific gravity at 20° C. of 1.03, is free of free hydrochloric acid and of monochlorides of pentanes, weighs about 8.5 pounds per gallon and has a boiling range between 130° C. and 160° C. Such a mixture of amylene dichlorides will remove road tar from road vehicles without seriously affecting the finish applied to the vehicles regardless of whether that finish is a lacquer or a varnish or an oil paint; and it will not injure other articles which become contaminated with road tar and from which road tar is removed in accordance with this invention. The amylene dichlorides used in the practice of this invention remain liquid at low temperatures, and are strong and effective solvents for substantially all substances classifiable and used as road tars, and have sufficiently

high boiling points to cause them to remain on the tar to be removed for a sufficient time to soften or dissolve the same.

Amylene dichloride of any structural formula may be employed in the practice of this invention, and it is not limited to the commercially available mixture referred to above, that mixture being referred to only as an example of amylene dichloride which may be used.

I claim:

In a method for the removal of road tar from road vehicles and articles contaminated thereby, the steps comprising applying amylene dichloride to the contaminating tar to be removed and thereby softening the tar, and then removing the softened tar.

In testimony whereof, I have signed my name to this specification.

ROBERT R. VALLEE.