

THE DEVELOPMENT OF SANDITE – A LIQUID-SAND ADHESION-IMPROVER

Slipmaster, a silica paste preparation intended for use as a vehicle-applied adhesion improver, has been shown to be capable of producing films on rails which cause low adhesion.

Slipmaster basically consists of a viscous water-based gel mixture with sand. A 6% solution of Cellofas is used to make the gel, and sand (Chalford 95) is mixed with the gel in an equal amount. Ethylene glycol, as anti freeze, is added at 14% of the total and a bacteriostat and a corrosion inhibitor as minor components complete the mixture. The last two have been ignored in this report.

The work described in this report was carried out to see if modifications to the existing system or a new system altogether could prevent this effect.

Sandite was found to be a most suitable material for use as an adhesion improver for particular sites that suffer known problems associated with low adhesion. It is suitable for application to the rail from a moving vehicle on a regular basis at such locations.

Service trails of such a system were carried out with some success on the Western Region however, further development points are highlighted.