

Paraffin wax has been used for 100 years as a consolidant for corroded iron (Salzer, 1887; Plenderleith, 1956), later modified with microcrystalline wax (Organ and Shorer, 1962) and graphite (Western, 1972). Wax is not an efficient water vapour barrier (Stevens and Johnson, 1952) for corrosion protection (Keene, 1984). Wax has been used as a consolidant for ivory (Lowe, 1910), wood (Petrie, 1904; Packard, 1971), textiles (Newell, 1933), zoological specimens (Noble and Jaeckle, 1926) corroded copper alloy (Fink, 1933), and frescoes and stonework (Heaton, 1921). Unfortunately the impregnated wax can rarely be removed and prevents the application of other materials for conservation (Johnson, 1984; Berger and Zelinger, 1975; Ashley-Smith, 1978). This use has been largely abandoned except on lead.

Paraffin wax was frequently used as a lifting material on archaeological sites (Droop, 1915) by pouring the molten liquid over objects. Wax has been used for temporary protection for fugitive pigments on paper during aqueous treatments. Advantage is taken of the inertness of wax in moulding. Wax polish provides a very good release agent for most resins.

A mixture of microcrystalline and paraffin waxes made up as a paste in hydrocarbon solvent has been recommended as a polish (Plenderleith and Werner, 1971) (Renaissance Wax) (*Picreator*).

100 g Cosmolloid 80H (microcrystalline wax) (*Astor*)

25 g Wax A (a PE wax) (*BASF*)

Melted together and poured into 300 ml of a high flash point hydrocarbon solvent, stirred constantly until cool.

A harder coating (Larson, 1979) can be made by heating together

90 g Cosmolloid 80H (*Astor*)

30 g Ketone Resin N (*BASF*)

200 ml a high flash point hydrocarbon solvent

This is stirred while cooling with further additions of white spirit to produce a suitable brushing consistency.

The insolubility of microcrystalline wax in cool solvents enables its use as a matting agent in varnishes (De Witte, 1975b). The wax must be dispersed in the varnish by heating the solution. If the varnish has to be removed later, the wax may remain in the object.

Polyethylene was introduced in the 1950s as a moisture vapour barrier for panel paintings (Werner, 1952). PE film was later used for laminating paper by heating and melting the polymer under pressure (Belen'kaya and Strel'sova). A relatively low molecular