Staining in Varnish Microporous Vapour Permeable

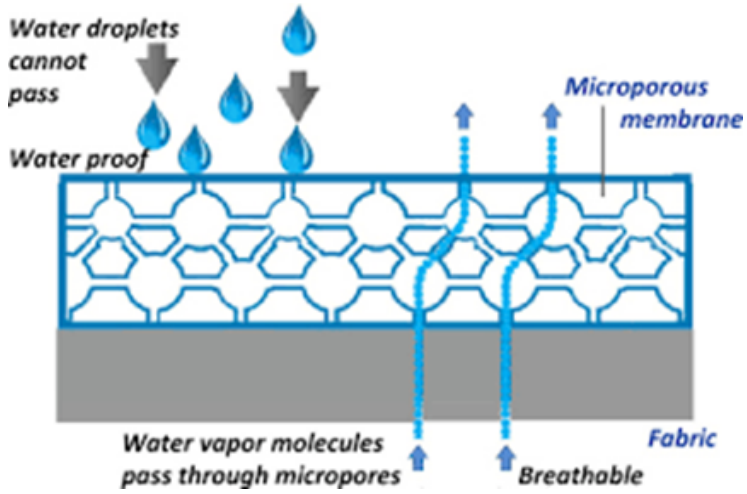
Staining or discoloration of the varnish by the previous coating. A soluble matter leeching out from a substrate of previous coating causing discolouration of fresh varnish.
Amongst substances likely to cause bleeding are bituminous coatings and residues, some dyestuff and lake pigments, metallic inks used on wallcoverings, tobacco tar deposits and resinous materials in timber. Stained areas resulting from burst pipes or overflows may also 'bleed'. Uncured or partially cured oil and solvent paints. Timber with soluble pigments (pink in Brazilian Mahogany).

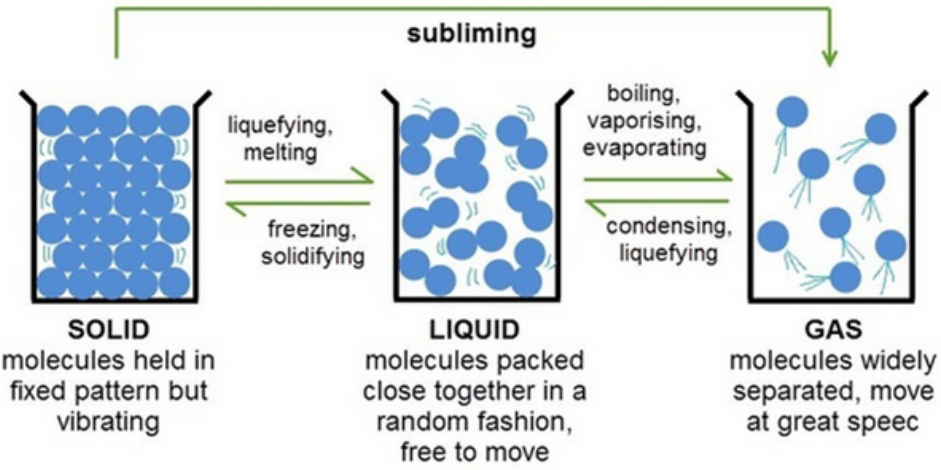
Where a potential cause of bleeding, e.g., a wallcovering or bituminous coating, can be removed before painting, it is advisable to do so. This will not be practicable if the source Is within the surface to be painted, e.g., on creosoted or resinous timber, and the usual approach in these instances is to apply stain resistant primer. However, no attempt should be made to seal bituminous materials, including creosote, until they have aged for at least a year. It may never be possible to overpaint thick, soft bituminous coatings satisfactorily.

Bleeding from metallic inks in wallcoverings can usually be prevented by applying an Alkali Resisting Primer as a sealer, although it is usually better to remove the wallcovering altogether. Alkali Resisting Primer is also effective in preventing bleeding from residues of tobacco tar, (nicotine staining), which may remain after the surface has been washed thoroughly with detergent solution in the absence of a more specialist primer.

Bleeding may not become evident until sometime after painting has been completed and it may not then be practicable to remove the whole coating and deal with the problem at its source.
In this case, application of the appropriate sealer followed by further coats of finish may provide a remedy.
Where the paint is porous (matt emulsion paint, chalk paint), the stain will only become evident when another coating is applied (i.e. protective varnish).

Breathable coating is also referred to as microporous or vapour permeable.





Liquid water/solvent is released from the coating as vapour.
As solvent (water or oil) vaporises the vapour moves through the substrate and dissolves stains that are present in the substate (wood or plaster). When the solvent/stain vapour finds its way to the surface through the varnish it deposits minute quantities of the solvated stain within the breathable varnish matrix, causing discolouration.

by Peter Wells, Polyvine Technical Director.