Silicone In Furniture Waxes And Polishes

The majority of today's commercial furniture polishes contain silicone in one form or another. Silicone is also found in almost all liquid and aerosol wax preparations. Commercial manufacturers add a silicone fluid to their furniture polishes to make the application of the waxes easier and to obtain a higher gloss. These cleaning and waxing products have been on the market for approximately 35 to 40 years. Since their introduction, it has become apparent that their use on furniture in museum collections can create a problem. Once a wax containing silicone has been applied, it can be difficult to remove. For this reason, waxes or polishes containing silicone should not be used on furniture in museum collections.

Silicone is manufactured by combining silicon with hydrogen, oxygen, and carbon. It is usually produced as a clear, odorless fluid. If a wax or polish containing silicone has been applied to the historic finish, difficulties in the restoration of that finish can result. Small crater-like indentations called fish eyes will appear on the surface where new finish has been applied. A silicone residue can be present on a piece of furniture even when the old finish is stripped down to the bare wood. Silicone contaminants do not become apparent until a new finish is applied. If it is known or suspected that a wax or polish containing silicone has been applied over a finish then record that fact on the object's catalog record.

Furniture in museum collections should be refinished only after every possible alternative to restore the historic finish has been explored (and then only if the interpretive goal to be met by a refinished piece significantly outweighs the historical and inherent value of the piece). If a new finish has to be applied to a piece of furniture that has been waxed or polished with a product that includes silicone, then the treatment will require specialized equipment and experience. Consult a furniture conservator concerning the treatment procedures required.

Ron Sheetz
Furniture Conservator
Division of Conservation
Harpers Ferry Center
National Park Service
Harpers Ferry, West Virginia 25425