

Floor Finish Building Blocks

POLYMERS - Polymers are large molecules composed of smaller units called monomers. Polymers generally refer to any substance that is polymeric in nature. In a polish (emulsion polymer, resin, wax) it usually refers to the main film forming ingredient or emulsion polymer. A copolymer is a jointure of two individual polymers. Polymers account for 60-80% of the material in the dry film. In the floor polish industry, polymers are generally acrylic in composition.

POLYETHYLENE OR WAX EMULSIONS - These are some other important components of a floor polish. Synthetic and natural, wax emulsions contribute scuff resistance and buffability to a floor polish. They may account for 10-30% of the dried film depending on the type of finish formula.

PLASTICIZERS - Chemicals, which allow the wet, polish film to convert into a touch, durable film while drying at room temperature. There are two types of plasticizers: permanent and fugitive. Fugitive plasticizers are referred to as coalescents. Both types of plasticizers are required in a balanced floor finish formula and have a significant effect on the performance of a floor polish film. Permanent plasticizers stay in the film for the life of the polish while fugitive plasticizers volatilize during the drying process thus controlling proper film formation. Plasticizers also aid in leveling.

ALKALI SOLUBLE RESINS - These resins promote leveling, gloss enhancement, and by virtue of their alkali solubility, removability (strippability).

DEFOAMERS Allows the finish to dry without the retention of foam bubbles, which would present an unsightly appearance to a dried film.

WETTING AGENTS - Used in small quantities these chemicals promote flow and leveling by reducing the surface tension of the wet polish.

STABILIZERS - Protects the finish during shipping and storage from viscosity increase and destabilization caused by high temperature or freezing. Stabilizers are usually specific members of the surfactant family. Stabilizers aid in shelf life stability

BIOCIDES - Protect against the growth of bacteria, fungi, and yeast. Biocides eliminate the formation of malodors, slime, and coagulation in a floor finish. Spoiled polishes generally can't be salvaged and result in a complete loss.

OTHER INGREDIENTS - On rare occasions, some polish formulas can contain fragrances, urethane emulsions, dye, optical brightness, and pH modifiers. These additions are not common and are sometimes used to offset some downsides of a given formula.

