

DAI-ICHI'S PRODUCTS

Polymerizable Surfactants

The water based paint industry is the largest consumer of latex from emulsion polymerization. The surfactants essential to the stability of the latex, play a crucial role in the production and application of emulsion polymers. However, they can also have adverse effects on the product properties due to their physical adsorption on the polymer particles. The unbound surfactants can migrate through the film towards the interfaces forming aggregates, which increase water sensitivity of the film, thus affecting its barrier properties. Exterior coating manufactured with conventional surfactants when exposed to rain will leach out the unbound surfactants leaving literally perforations in the film leading to failure of the coating to protect the walls.

One of the best ways to reduce the negative effects of the conventional surfactants is to use polymerizable or reactive surfactants that are covalently linked to the polymer, which avoids its desorption and migration during the film formation and hence better barrier properties.

Neowet PSA 2A	Anionic surfactant. Can be used as a primary or secondary emulsifier in emulsion polymerizations. It also modifies the monomer composition in the resulting polymer.
Neopon COP 20	Anionic surfactant, APEO free, used for emulsion polymers which form the base for adhesives, paper coating, road marking paints, etc
Neopon COP 205 CH	Anionic phosphate ester based reactive surfactant in concentrated form. Primary emulsifier in emulsion polymerizations. APEO free. Specifically used for adhesives.
Neopon JMV 24	Anionic surfactant & APEO free. Primary emulsifier for styrene acrylates.