

Abstract

POLYMERIC DISPERSANTS FROM PHENYL GLYCIDYL ETHER

Copolymers comprising recurring units of a phenyl glycidyl ether and alkylene oxides are disclosed. Some of the copolymers comprise a di- or polyfunctional nucleophilic initiator and recurring units of the phenyl glycidyl ether and an alkylene oxide. The di- or polyfunctional nucleophilic initiator is an alcohol, phenol, amine, thiol, thiophenol, sulfinic acid, or deprotonated species thereof. Other copolymers comprise a monofunctional nucleophilic initiator selected from thiols, thiophenols, aralkylated phenols, sulfinic acids, secondary amines, C10-C20 terpene alcohols, and deprotonated species thereof. Pigments dispersions comprising the copolymers are also disclosed. The copolymers meet the growing needs of the industry with their ease of manufacture, diverse structures, and desirable performance attributes for dispersing a wide range of organic and inorganic pigments. Agricultural applications for the copolymers are also disclosed.