

LATENT MERCAPTAN STABILIZERS FOR IMPROVED WEATHERABILITY
OF CLEAR HALOGEN-CONTAINING POLYMER COMPOSITIONS

ABSTRACT OF THE DISCLOSURE

Stabilizer compositions useful for protecting clear polyvinyl chloride and other clear halogen-containing polymer compositions used in the manufacture of exterior weatherable products against discoloration and degradation caused by exposure to ultraviolet light and weathering in addition to heat comprising a latent mercaptan which degrades during processing of the composition at an elevated temperature to liberate a free mercaptan, in combination with a synergistic amount of a free phenyl salicylate compound. The latent mercaptan may be the sole heat stabilizer additive in the stabilizer composition, but the free mercaptan released during processing may also synergize the activity of organic-based or metal-based heat stabilizers such as metal salts and organometallic stabilizers such as organotin carboxylates and organotin mercaptides in the polymer composition.

Clear polyvinyl chloride and other clear halogen-containing polymer compositions containing these compounds are also provided which exhibit improved ultraviolet light stability and weatherability without detracting from their thermal performance.

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