

A LATENT MERCAPTAN AS A HEAT STABILIZER

ABSTRACT OF THE DISCLOSURE

Flexible, semi-rigid, and rigid vinyl chloride polymer compositions comprising a latent mercaptan-containing heat stabilizer are substantially free from the offensive odor typically associated with mercaptans and are protected during processing by the degradation products of the latent (i.e., blocked) mercaptan which include a free mercaptan. The free mercaptan thus released enhances the activity of metallic-based heat stabilizers such as zinc carboxylates and organotin carboxylates and mercaptides in the polymer composition. Other products of the degradation are believed to include carbocations of the blocking moiety which are stabilized by a molecular structure in which the electron deficiency is shared by several groups. The latent mercaptan is selected from the group consisting of a 2-S-(tetrahydropyranyl)-thioalkanol, a carboxylic acid ester thereof, a 2-S-(tetrahydropyranyl)-thioglycolic acid, and an ester thereof.

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