

## **The Effect of UVITA SME-3811 on Octocrylene Colorless UVA for Polyolefins**

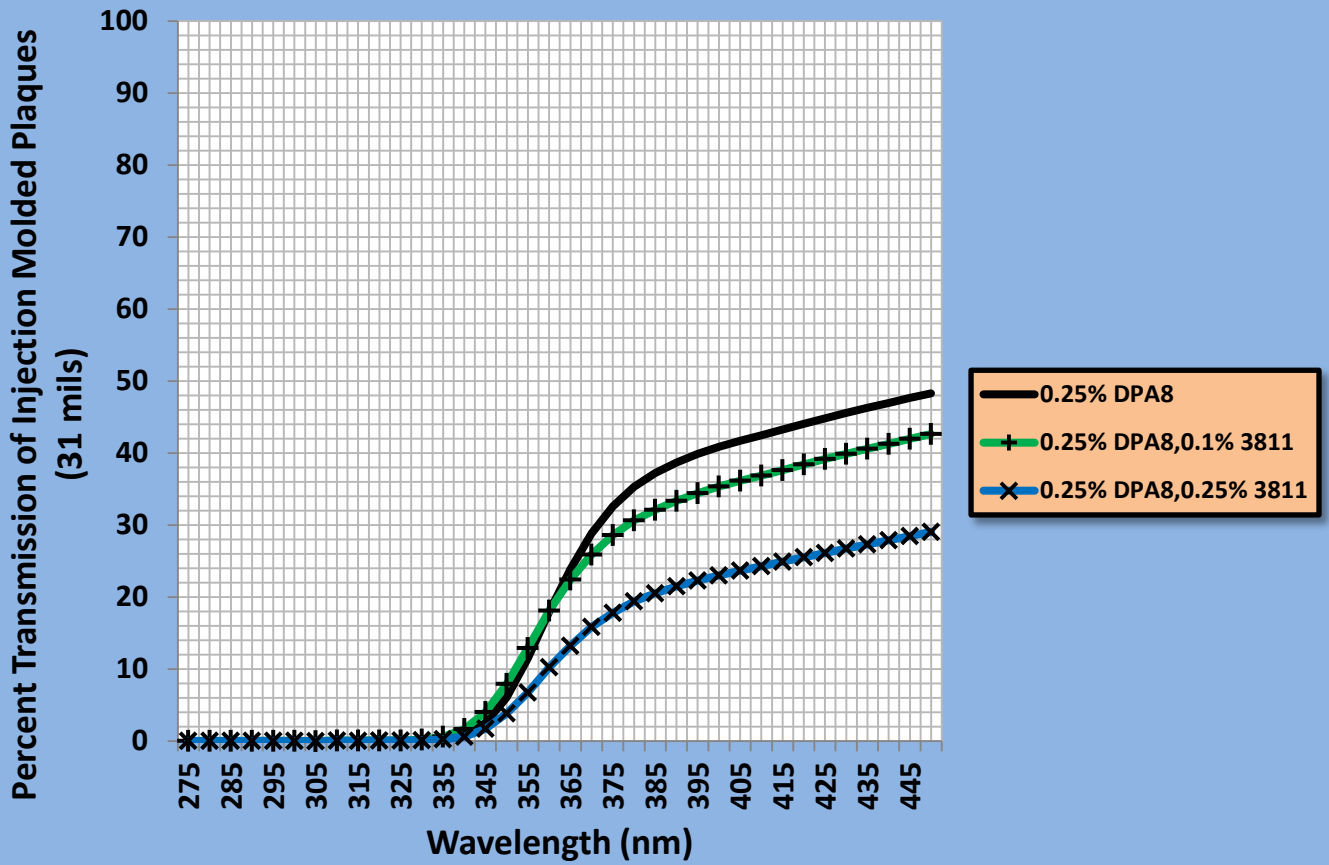
The use of Ultraviolet Absorbers for polyolefins to reduce the transmission of harmful radiation to contents in containers typically results in a choice between perceived color of the final container or performance.

In the past 2-ethylhexyl-2-cyano-3, 3,-diphenyl acrylate has been a common addition to high density polyethylene for jugs containing liquids. This is a colorless UVA limited by its cut off at 350 nm.

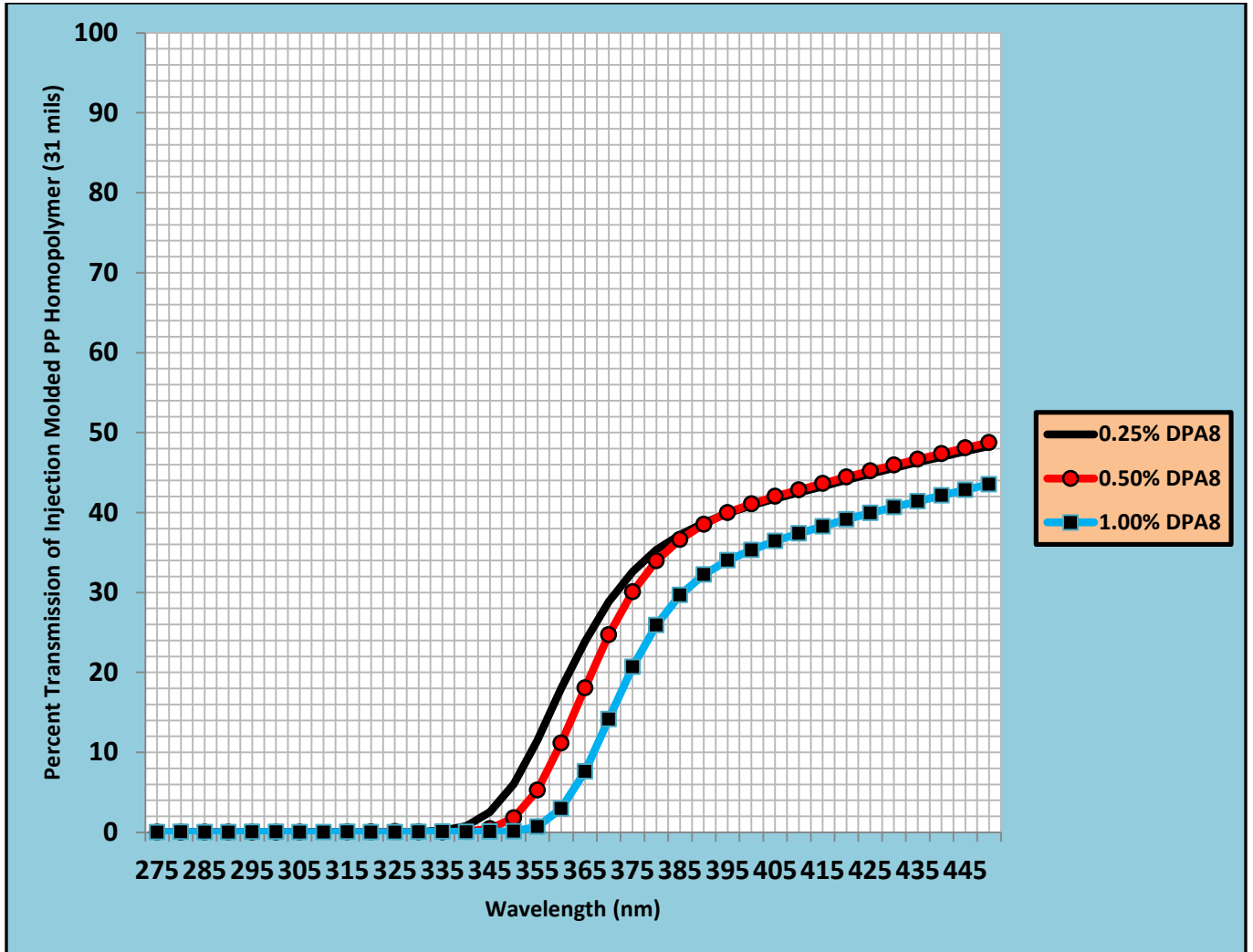
Besides plastic which include PVC and HDPE this is a common additive for liquid formulations in many coating applications that are color sensitive.

Recent studies with Maxgard DPA-8 show that combinations of the liquid absorber and UVITA SME-3811, a solid broad spectrum UVA with permanence over the lifetime of the additive and without temperature restrictions for use provides for a broader absorbance and protection.

## Polypropylene Homopolymer Injection Molded Plaques



Combinations increase wavelength protection.



The effect of various concentrations of DPA-8 and transmission.

Joe Webster