

Tuning Radiation curing for today's regulatory requirements

It is more and more challenging to adjust to regulatory requirements and Radiation curing inks, coatings and adhesives is no exception. Ensuring that formulations are compliant and safe to use is a key criteria for all applications.

Most recently the new classification of one of the most commonly used reactive diluents TMPTA has increased the demand for alternative high performance resins.

Ethoxylated and propoxylated versions of TMP and pentaerythritol are good alternatives.

Also due to increased regulatory concerns there is today a need for safe molecules with a rigid structure. Pentaspiroglycol (PSG) is a rigid cycloaliphatic diol with primary hydroxyl groups. PSG can for example be used to produce high Tg polyesters or diglycidyl ethers.

In food packaging applications low migration is absolute key and this challenge is increasingly difficult also as LED is replacing traditional mercury lights. One way to achieve lower migration and higher reactivity is to utilize high functionality resins.