

Lencolo 5007D Liquid Deep-cure Photoinitiator TPO

Description

Lencolo 5007D is liquid TPO with a broad absorption range, featuring an effective absorption peak at 240–400 nm and continued absorption up to approximately 420 nm. Its absorption peak is longer than that of conventional photoinitiators. Upon irradiation, it generates both benzoyl and phosphinoyl radicals, each capable of initiating photopolymerization, resulting in fast UV curing. It also exhibits photobleaching properties, making it suitable for thick-film deep curing and non-yellowing coatings. Low volatility makes it suitable for use in water-based systems.

Technical Data

Composition	Liquid TPO
Appearance	Light yellow liquid
Purity (%)	≥ 95
Acidity Value	≤ 4
Volatile Content (%)	≤ 0.5
Absorption Peak(nm)	240、270、395

Product Features

Liquid TPO exhibits excellent compatibility with various monomers and UV resins, providing convenient use. It is highly suitable for 100% solids UV systems, a wide range of UV ink systems, and UV formulations where adding powdered photoinitiators makes fine-mesh filtration difficult. Compared with conventional TPO, most properties are similar. While the curing rate is slightly slower, it offers lower yellowing tendency and can be used in water-based UV systems.

Applications

This product is mostly used in white systems, and can be used in photocurable coatings, printing inks, UV curing adhesives, optical fiber coatings, photoresists, photopolymerization printing plates, stereolithography resins, composite coating materials, dental fillings, and other related applications.

Recommended Usage

Recommended addition: 0.5~5%

It is recommended that users determine the optimal dosage through preliminary testing before use.

Precaution & Storage

This photoinitiator absorbs long-wave UV light, and products containing it are sensitive to sunlight. As a result, during storage and handling, exposure to light with wavelengths below 500 nm must be avoided (e.g., cover windows and lamps with yellow film).

To prevent premature polymerization due to the high reactivity of this product, keep it tightly sealed and store away from heat sources and direct sunlight. It is recommended to maintain storage temperature below 30 °C. Unused product should be promptly resealed and must not be left open. Under ventilated conditions at 25 °C, the product has a safe storage period of 6 months. Available packaging: 25 kg per drum

Tips:Lencolo 5007D liquid TPO has good yellowing resistance and LED curing effect, which is very suitable for 100% solid UV system and provides convenient addition.

Note: Technical data represents typical values only. In view of the differences in formulas, production process, conditions, all the above statements must be adjusted according to the actual situation, our company does not make any promises. Our company reserves the right to reform its products without prior notice of any changes.