

Lencolo 5044 Eco-friendly Deep-cure Photoinitiator

Description

Lencolo 5044 photoinitiator features a broad absorption range, with an effective peak between 240–405 nm and continuous absorption extending to around 420 nm. Its absorption peak is longer than that of conventional photoinitiators. Upon irradiation, it generates both benzoyl and alkoxy radicals, each capable of initiating photopolymerization, resulting in fast curing. It also exhibits photobleaching properties, making it suitable for thick-film deep curing and coatings with excellent yellowing resistance. It has a low dissolution temperature, and its curing by-products meet environmental requirements. It is widely used in various UV-curable systems.

Technical Data

Composition	2,4,6-Trimethylbenzoyl-diphenylphosphine oxide
Appearance	Light yellow fine
Purity (%)	≥ 98
Melting Point (°C)	120 - 130
Ash Content(%)	≤ 0.2
Absorption Peak(nm)	240、365、395、405

Product Features

1. As a novel photoinitiator, primarily used in UV-curable coatings, inks, adhesives, and other fine chemical applications
2. Offers higher environmental safety compared with conventional photoinitiators, being free of reproductive toxicants and compliant with EU REACH registration standards
3. Exhibits excellent performance, including high initiation efficiency, fast curing speed, and enhanced coating properties

Applications

Widely used in white systems; applicable for UV-curable coatings, printing inks, UV adhesives, optical fiber coatings, photoresists, photopolymer plates, stereolithography resins, composite coatings, dental fillings, and other applications

Recommended Usage

Recommended addition level: 0.5~3%

Users are advised to determine the optimal addition level through preliminary testing

Storage Conditions

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

Precaution

This photoinitiator absorbs long-wave light, making products containing it sensitive to sunlight. During storage and handling, light below 500 nm must be excluded (e.g., using yellow film covers for windows and lamps).

Tips: Lencolo 5044 is a novel, environmentally friendly, low-migration photoinitiator, free of reproductive toxicants and compliant with EU REACH registration standards

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.