General Information

Omnirad TPO is a highly efficient, low yellowing, Type I photoinitiator used to initiate radical polymerization of unsaturated oligomers e.g. acrylates, after exposure to UV light. It can be used in combination with mono or multi functional monomers as reactive diluents.

Chemical Data

- **Chemical Name**: 2,4,6-Trimethylbenzoyl-diphenyl-phosphine oxide
- **Molecular weight**: 348.4 g/mol
- **CAS No.**: 75980-60-8
- **EINECS No.**: 278-355-8

Absorption Spectrum

![Absorption Spectrum of Omnirad TPO](image)
Typical Physical Properties

**Appearance:** Pale yellow crystalline powder  
**Melting point:** 91 - 94 ºC  
**Purity (HPLC):** ≥ 99%

Application

Omnirad TPO may be used, after adequate testing, in UV curable coating and ink formulations based on acrylates, for substrates such as paper, wood, metal, plastics and glass.

Features & Benefit

Omnirad TPO absorbs UV light at longer wavelengths making it particularly suitable for curing white pigmented formulations and thick films. Omnirad TPO can be used as the sole initiator or in combination with other photoinitiators e.g. α hydroxyl ketones.

Recommended Addition Levels

An addition level of 0.3 - 3% by weight of formulation is recommended for technical applications.

Storage & Handling

Do not expose to direct sunlight. Store product at room temperature between 5 ºC and 25 ºC. Avoid contact with alkaline additives and water. Store in the original packaging. If kept unopened in the original sealed packaging and stored correctly the product will have a shelf life of 2 years.

Omnirad TPO should be handled in accordance with good industrial practice. Further information is provided in the material safety data sheet which is available on request.

Packaging

20Kg cartons

Important:
The information presented in this data sheet is given in good faith and is based on the material available to us at the time of writing. The information is not to be taken as a warranty or representation for which we assume legal responsibility, nor as permission or recommendation to practice any patented invention without a license. It is offered solely for consideration, investigation and verification.