

PowerCure™ TPO Photoinitiator

Introduction

PowerCure™ TPO is a highly efficient curing agent which is used to initiate radical photopolymerisation of unsaturated resins such as those based on a prepolymer - e.g. acrylates - in combination with mono- or multifunctional monomers as reactive thinners.

Chemical Name

2,4,6-Trimethylbenzoyl-diphenyl-phosphineoxide

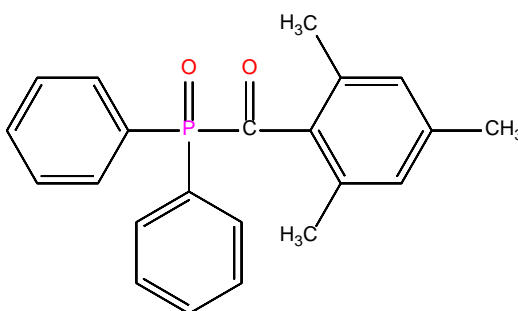
CAS Number

75980-60-8

EINECS Number

278-355-8

Chemical Structure



Chemical Formula

$C_{22}H_{21}O_2P$

Molecular Weight

348

Physical Properties

Appearance	Yellow crystal
Melting point (°C)	91-95
Specific Gravity (g/cm ³)	1.2
Loss on drying (%)	Max.0.2
Ash (%)	Max.0.1
Acid Value (mg KOH/g)	Max.0.5
Purity (%)	Min.99

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Solubility

Solubility [20°C]	% w/w
Acetone	47
n-butyl-acetate	25
IBOA	15
IDA	7
PEA	34
HDDA	22
TrPGDA	16
TMPTA	14
TMPEOTA	13
PowerCure™ 1173	>50

Benefits & Applications

PowerCure™ TPO may be used in UV curable formulations for clear and for pigmented coatings on wood, metal, plastic, paper and optical fibers as well as for printing inks and adhesives after adequate testing.

PowerCure™ TPO can be used as the sole photoinitiator or in combinations with other photoinitiators due to the good solubility of this product in common UV reactive systems.

The amount of PowerCure™ TPO required for optimum performance should be determined in trials covering a concentration range.

Handling & Storage

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Protect skin. Avoid dust formation and ignition sources.

This product may be stored up to one year in a sealed container. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat or sunlight could reduce product life. Keep containers sealed when not in use.

For more detailed information please refer to the material safety data sheet.

Packing

PowerCure™ TPO is supplied in a 20Kg Carton.



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Note

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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We disclaim liability for any incidental or consequential damages.