

PowerCure™ 819 Photoinitiator

Introduction

PowerCure™ 819 is a versatile photoinitiator for radical polymerisation of unsaturated resins upon UV light exposure. It is especially suited for white pigmented formulations, the curing of glass fiber reinforced polyester/styrene systems and for clearcoats for outdoor use in combinations with light stabilizers. Thick section curing is also possible with this photoinitiator.

Chemical Name

Bis(2,4,6-trimethylbenzoyl)-phenylphosphineoxide

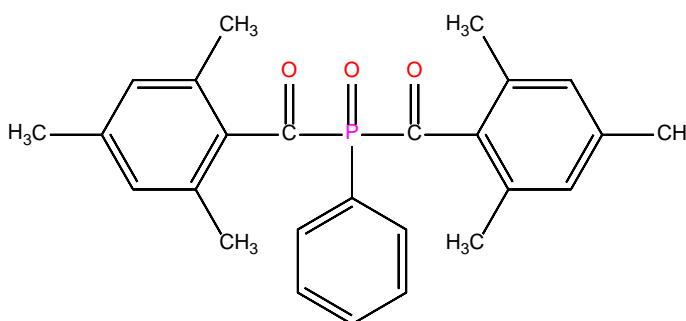
CAS Number

162881-26-7

EINECS Number

423-340-5

Chemical Structure



Chemical Formula

C₂₆H₂₇O₃P

Molecular Weight

418.5

Physical Properties

Appearance	Yellowish powder
Melting point (°C)	127-135
Purity (%)	Min.98

PowerCure™ 819 Photoinitiator

Solubility

Solubility [20°C]	% w/w
Acetone	14
Butyl acetate	6
Methanol	3
Toluene	22
Hexanedioldiacrylate (HDDA)	9
Oligomeric acrylate	3

Benefits & Applications

PowerCure™ 819 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 prepreps after adequate testing.

PowerCure™ 819 exhibits at low concentrations an outstanding curing performance in highly opaque white and colored furniture coatings or screen inks containing rutile titanium dioxide or colored pigments and affords minimum yellowing after exposure to sufficient amounts of UV radiation. In addition, the outstanding absorption properties of this product allow curing of thick sections.

PowerCure™ 819 can be used in combination with other photoinitiators such as PowerCure™ 184 and it is especially suited to cure polyester/styrene resins as used for glass reinforced materials with some photoinitiators.

PowerCure™ 819 can also easily be used in combinations with UV absorbers due to its photosensitivity at longer wavelengths. It is therefore ideally suited for use in weather-resistant UV curable coatings.

The amount of PowerCure™ 819 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.

PowerCure™ 819 Photoinitiator

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™ 819 is supplied in a 20kg Carton.

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.

We specifically disclaim any other express or implied warranty of fitness for a particular purpose or merchantability.

We disclaim liability for any incidental or consequential damages.