

PowerCure™ 651 Photoinitiator

Introduction

PowerCure™ 651 a photoinitiator, which is used to initialise radical polymerization e.g. in the preparation of acrylate polymers. When under the influence of light the molecule will form radicals which initiate the radical polymerization.

Chemical Name

2,2-Dimethoxy-1,2-diphenyl-ethanone

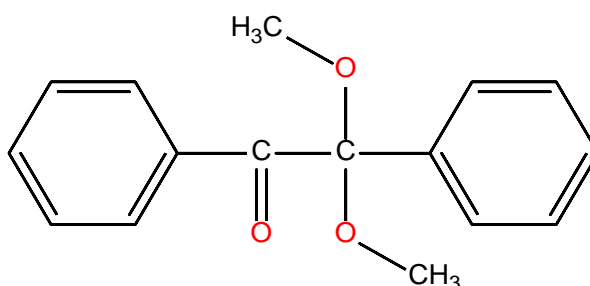
CAS Number

24650-42-8

EINECS Number

246-386-6

Chemical Structure



Chemical Formula

C₁₆H₁₆O₃

Molecular Weight

256.3

Physical Properties

Appearance	White crystal
Melting Point [°C]	67-70
Boiling Point [°C]	169
Density	1.1320
Vapor Pressure [25°C, Pa]	0.002
Refractive Index	1.5590
Assay (%)	Min.99.0
Ash (%)	Max.0.1
Fp [°C]	190
Loss on Drying (%)	Max.0.5
Ignited Residue (%)	Max.0.1

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Water Content	Max.0.5
Benzoin Residue (%)	0.2
Transmission 425nm (%)	Min.95.0
Transmission 450nm (%)	Min.96.0
Transmission 500nm (%)	Min.98.0

Solubility

Solubility [20°C]	% w/w
Acetone	>50
Methanol	41
Styrene	>50
Butyl Acetate	>50

Benefits & Applications

PowerCure™ 651 is widely used in the polymerization of acrylic acid and acrylate, the polymerization and crosslinking of unsaturated polyester.

PowerCure™ 651 can be applied in coatings and adhesives and mainly used as UV (ultra-violet) curing agent in UV curing system, applied to ink, paper and metal paint.

PowerCure™ 651 is a kind of highly efficient UV curing initiator, which is mainly used as initiator of UV curing reaction.

PowerCure™ 651 is used as analytical reagent, and used for photosensitive resin printing.

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.

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Packing

PowerCure™ 651 is supplied in 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.