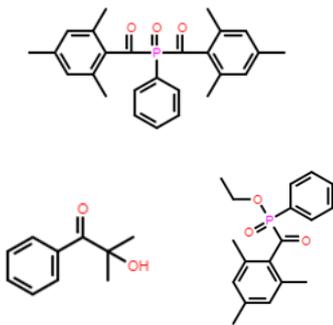


Product Data Sheet

General Information

Omnirad 2022 is a highly efficient liquid curing agent that is used to initiate radical polymerization of unsaturated resins after exposure to UV light. Omnirad 2022 is the first choice for use in pigmented formulations of all colors, for curing of thick sections or for UV-stabilized clear coatings. Unsaturated resins that are particularly suitable are those based on a prepolymer – e.g., acrylates or unsaturated polyesters – in combination with mono- or multifunctional monomers as reactive diluents. Omnirad 2022 is a photoinitiator mixture with well-balanced surface and through cure.

Chemical Data

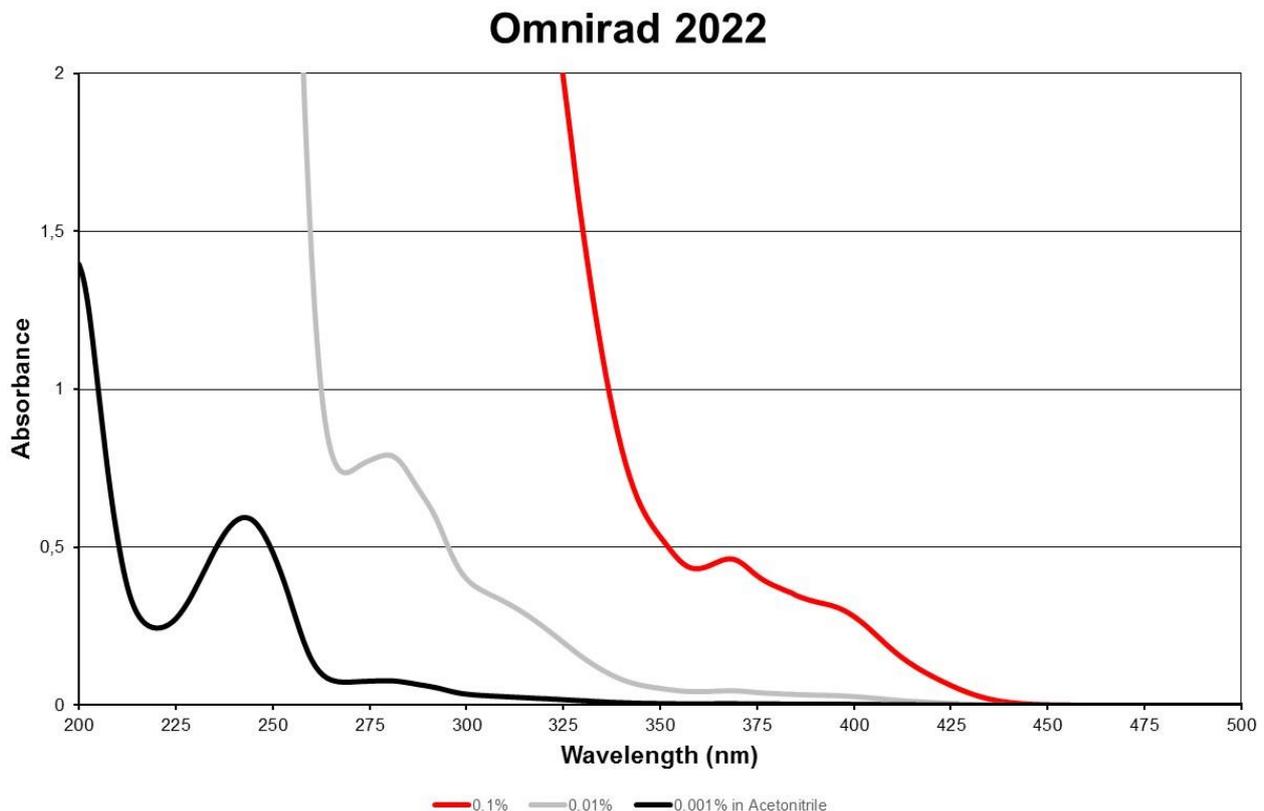


Chemical Name: Blend of 2-Hydroxy-2-methyl-1-phenylpropanone, Bis(2,4,6-Trimethylbenzoyl)phenylphosphine oxide and Ethyl(2,4,6-Trimethylbenzoyl)-phenylphosphinate

Molecular weight: 164.20 g/mol + 418.46 g/mol + 316.3 g/mol

CAS No: 7473-98-5 + 162881-26-7 + 84434-11-7

Absorption Spectrum



Specification

Appearance	Visual	Yellow liquid
Transmittance @ 500 nm	Spectrophotometer, 10g/100ml Toluene	≥ 95.0 %
Absorbance	1.000 g/l in acetonitrile at 340 nm	0.76 - 0.89 %

Application

Omnirad 2022 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 composites. For patent reasons, however, the use of this product is not allowed in dental applications.

Suitable UV curable formulations may be based on acrylate resins, acrylate monomer systems and unsaturated polyesters. As a liquid photoinitiator, Omnirad 2022 is especially easy to incorporate into formulations.

Omnirad 2022 exhibits outstanding curing performance in highly opaque furniture coatings or screen inks containing rutile titanium dioxide. Additionally, the outstanding absorption properties of Omnirad 2022 allow curing of thick sections.

Omnirad 2022 is the most cost-effective solution for the curing of pigmented UV-curable compositions due to its outstanding reactivity with a well-balanced ratio between through and surface curing.

Formulated product properties will depend on the actual reactive monomers, oligomers and additives utilized.

Recommended Addition levels

The amount of Omnirad 2022 required for optimum performance should be determined in trials covering a concentration range :

clear acrylate coatings	1.0 – 2.0 %
white acrylate furniture coatings	1.5 – 3.5 %
white screen printing inks	2.0 – 4.0 %
glass-reinforced UPES/styrene prepregs and composites	1.0 – 2.0 %

Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. Opened drums should be sealed after use to protect the product from light. When exposed to low temperatures or when stored for extended periods, Omnirad 2022 may crystallize, which can be reversed by stirring and heating to 80 °C (176 °F) for several hours. The temperature should be reduced to 60 °C (140 °F) for overnight heating or even to 50 °C (122 °F) over a weekend.

Avoid contact with alkaline additives and water. Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 24 months.

Omnirad 2022 should be handled in accordance with good industrial practice. Further information is provided in the material safety data sheet which is available on request.

Regulatory Status

All information can be found on MSDS (Material safety data sheet) and RIS (Regulatory Information Sheet) available upon request.

Packaging

Omnirad 2022 is available in 20 kg cans.

Disclaimer:

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.

EUROPE
IGM Resins B.V. (Head office)
T : +31 416 316 657
sales@igmresins.com

NORTH AMERICA
IGM Resins USA Inc.
T : +1 630 2131616
sales@igmresins.com

ASIA-PACIFIC
IGM Resins Shanghai Co., Ltd.
T : +86 21 5208 0993

IGM Resins Taiwan Ltd.

T : +886 342 75275

IGM Japan GK
T : +81 3 5219 1502
sales@igmresins.com

SOUTH AMERICA
Quiminutri Comercio de
Especialidades Quimicas S.A.

T : +55 19 3856 4480
comercial@igmesins.com.br