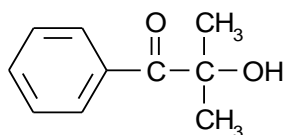


Product Data Sheet

General Information

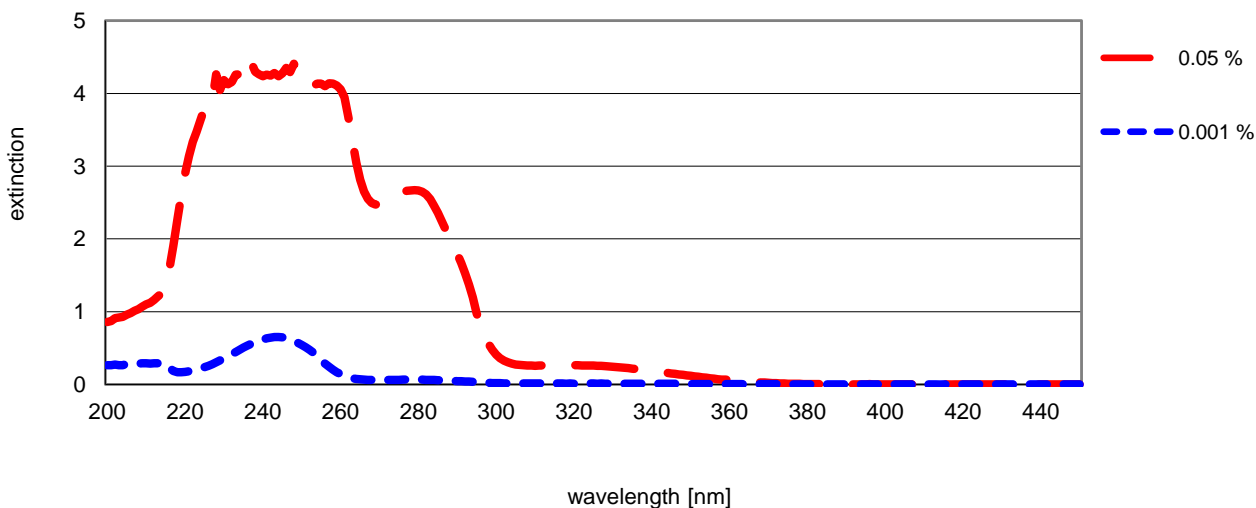
Omnirad 1173 is a versatile highly efficient liquid photo initiator which is used to initiate the photo polymerization of chemically unsaturated prepolymers – e.g., acrylates – in combination with mono- or multi-functional monomers.

Chemical Data



Chemical Name : 2-hydroxy-2-methyl-1-phenyl-propan-1-one
Molecular weight : 164.2 g/mol g/mol
CAS No. : 7473-98-5

Absorption Spectrum



Omnirad 1173 concentration in acetonitrile

Typical properties

Physical form	colorless to slightly yellow liquid
Odor	slight
Density at 20 °C (68 °F)	~ 1.08 g/cm³
Melting point	4 °C (39 °F)
Boiling point at 0.13 mbar	80–81 °C (176–178 °F)
Flash point	> 100 °C (212 °F)
Viscosity at 20 °C (68 °F)	~ 25 mPa . s
Miscibility > 50 g/100 g in most common organic solvents as well as in most acrylate-based monomers, practically insoluble in water	

Application

Omnirad 1173 may be used after adequate testing for applications such as UV-curable clear coatings based on acrylates for paper, metal and plastic materials.

As a liquid UV curing agent with excellent compatibility, Omnirad 1173 is especially easy to incorporate. It is therefore highly suitable for blends with other photo initiators.

Omnirad 1173 is especially recommended when UV coatings are required to exhibit only minimal yellowing even after prolonged exposure to sunlight. Yellowing of urethane acrylates may be further reduced by addition of hindered amine light stabilizer Omnistab LS 292.

Recommended Addition levels

The amount of Omnirad 1173 required for optimum performance should be determined in trials covering a concentration range :

film thickness 5–20 µm	2–4 % Omnirad 1173 as supplied
film thickness 20–200 µm	1–3 % Omnirad 1173 as supplied

Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. 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 36 months.

Omnirad 1173 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

Omnirad 1173 is available in 1000 kg IBC, 200 kg drums and 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.