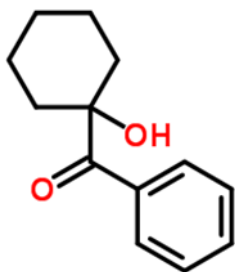


Product Data Sheet

General Information

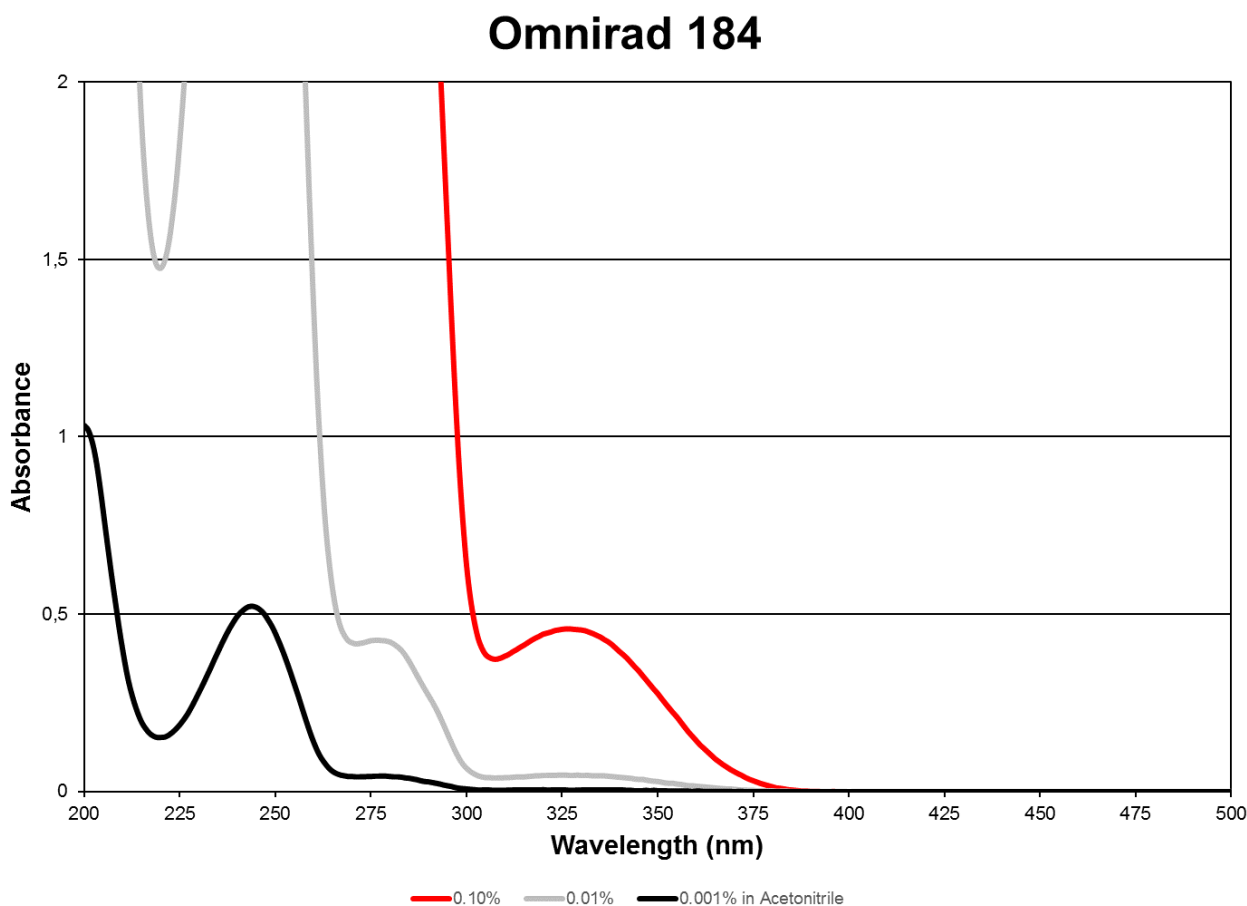
Omnirad 184 is a highly efficient non-yellowing photoinitiator used to initiate the photo polymerization of chemically unsaturated prepolymers – e.g., acrylates – in combination with mono- or multifunctional vinyl monomers

Chemical Data



Chemical Name: 1-Hydroxycyclohexyl-phenyl ketone
Molecular weight: 204.3 g/mol
CAS No: 947-19-3

Absorption Spectrum



Specification

Appearance	Visual	Fine to coarse, white powder
Purity	GC analysis	≥ 99.0 %
Volatiles	Loss on Drying	≤ 0.5 %
Transmittance @ 425 nm	Spectrophotometer, 10g/100ml Toluene	≥ 98.0 %
Transmittance @ 500 nm	Spectrophotometer, 10g/100ml Toluene	≥ 98.0 %
Clarity of solution	Visual, 10g/100ml Toluene	Clear

Additional Typical Properties

Melting point (dependent on method)	47 – 49 °C (117 – 120 °F)
Solubility at 20 °C (68 °F)	
butyl acetate	> 50 % by weight
hexanediol diacrylate (HDDA)	> 50 % by weight
trimethylolpropane triacrylate (TMPTA)	~ 43 % by weight
tripropylene glycol diacrylate (TPGDA)	~ 43 % by weight

Application

Omnirad 184 may be used for applications such as UV-curable clear coatings based on acrylates for paper, metal and plastic materials.

Omnirad 184 is especially recommended when UV coatings are required to exhibit only minimal yellowing even after prolonged exposure to sunlight.

Yellowing of urethane-acrylate systems for outdoor applications directly exposed to sunlight may be further reduced by adding the hindered amine light stabilizer Omnistab LS 292.

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

Recommended Addition levels

The amount of Omnirad 184 as supplied required for optimum performance should be determined in trials covering a concentration range :

film thickness 5 – 20 µm	2 – 4 %
film thickness 20 – 200 µm	1 – 3 %

Storage & Handling

Omnirad 184 is sensitive to visible light and any exposure to sunlight should be avoided. Opened packaging should be closed after use to protect the product against light. In view of the low melting point of 48°C the product tends to lumping already at temperatures above 30°C. Therefore, it should be stored at temperatures <35°C, preferably below 30°C. Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 36 months.

Omnirad 184 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 184 is available in 100 Kg drum and 20 Kg carton.

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.

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