

## Product Data Sheet

### General Information

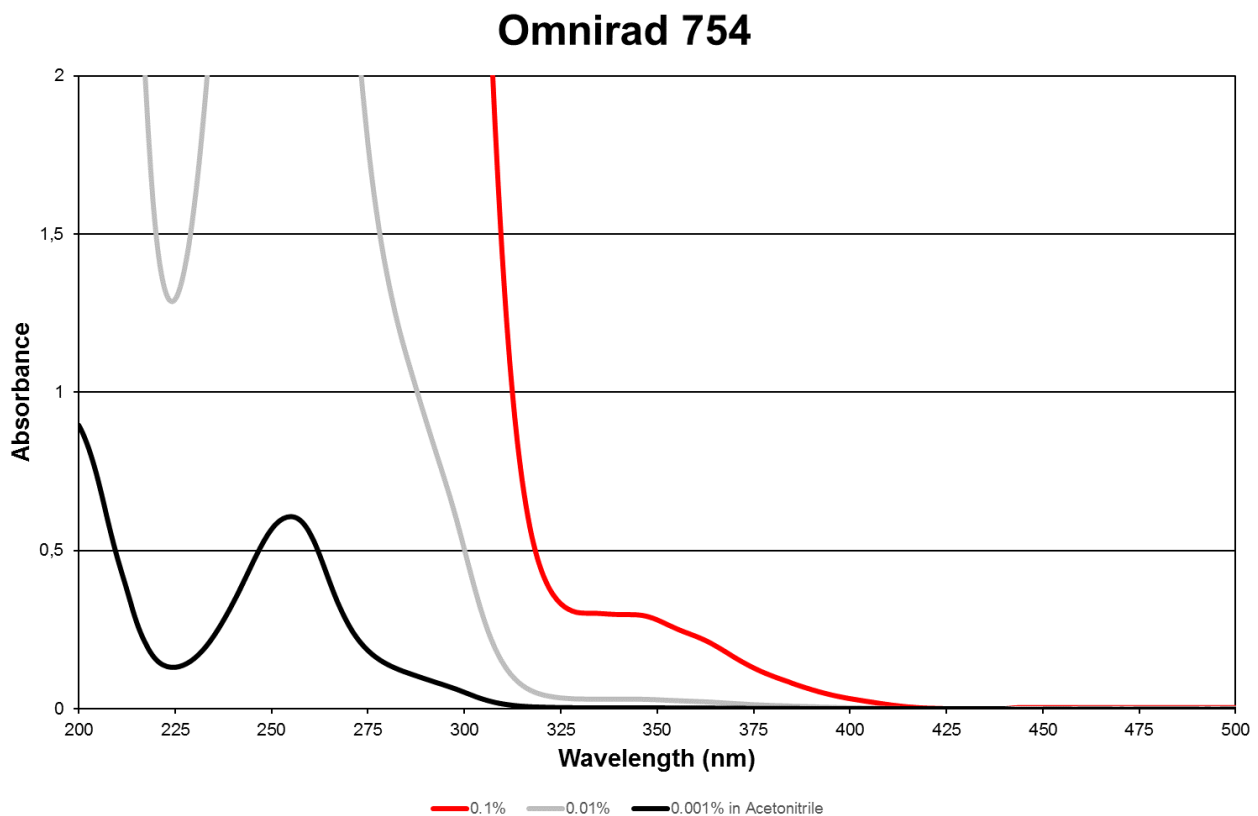
Omnirad 754 is a liquid photoinitiator which is used to efficiently initiate the photo polymerization of unsaturated prepolymers – e.g., acrylates – in combination with mono- or multifunctional vinyl monomers. It is particularly recommended when low residual odor, low emission and low yellowing after curing are required. It is suitable for conventional UV-curable formulations.

Omnirad 754 achieves a good balance between the requirements of low residual odor, low emission after cure and efficient polymerization. An additional benefit is the minimal yellowing after curing.

### Chemical Data

**Chemical Name:** Blend of oxy-phenyl-acetic acid 2-[2-oxo-2-phenyl- acetoxyethoxy]-ethyl ester and oxy-phenyl-acetic acid 2-[2-hydroxyethoxy]-ethyl ester  
**CAS No:** Proprietary

### Absorption Spectrum



## Specification

<b>Appearance</b>	<b>Visual</b>	<b>Yellow liquid</b>
<b>Color</b>	<b>Gardner</b>	<b>≤ 5.5</b>
<b>Purity</b>	<b>HPLC analysis</b>	<b>≥ 95.0 %</b>
<b>Transmittance @ 425 nm</b>	<b>Spectrophotometer, 10g/100ml Toluene</b>	<b>≥ 40.0 %</b>
<b>Transmittance @ 450 nm</b>	<b>Spectrophotometer, 10g/100ml Toluene</b>	<b>≥ 94.0 %</b>
<b>Transmittance @ 500 nm</b>	<b>Spectrophotometer, 10g/100ml Toluene</b>	<b>≥ 98.0 %</b>
<b>Clarity of solution</b>	<b>Visual, 10g/100ml Toluene</b>	<b>Clear</b>
<b>Viscosity</b>	<b>Haake at 25 °C</b>	<b>0.100 - 0.220 Pa.s</b>
<b>Refractive Index</b>	<b>Refractometer</b>	<b>1.540 - 1.545</b>

## Application

Omnirad 754 may be used, after adequate testing, mainly in clear coats used to protect plastics and wood. Omnirad 754 can be used as a sole photoinitiator or in combination with other photoinitiators to enhance specific properties (through curing, reactivity, etc.).

Potential applications for Omnirad 754 are:

- clear coats for PVC floors,
- top coats for wood parquets,
- plastic coatings in general (Compact Discs, cellular phones, etc.),
- wood furniture,
- UV-curable UV-stabilized coatings.

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

## Recommended Addition levels

The amount of Omnirad 754 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

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. Recommended storage temperature is 20 - 40 °C. Lower temperatures can lead to partial crystallization of the Omnirad 754. The performance of Omnirad 754 as a photoinitiator will, however, not be adversely affected by this crystallization. If crystallization is observed it is necessary to re-dissolve the crystalline material in the liquid phase, while stirring the material at a temperature of approx. 30 °C (86°F) until the crystalline materials is dissolved. In case of a crystallization the liquid phase of Omnirad 754 shouldn't be used, because this can have a negative influence in solubility and stability of the crystalline phase.

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 754 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 754 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.

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