

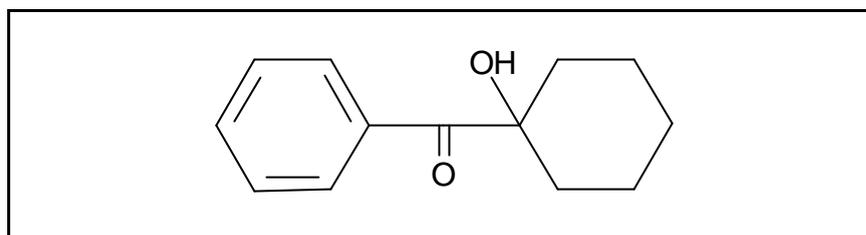
# Ciba<sup>®</sup> IRGACURE<sup>®</sup> 184

## Photoinitiator

### General

IRGACURE 184 is a highly efficient non-yellowing photoinitiator which is used to initiate the photopolymerisation of chemically unsaturated prepolymers - e.g. acrylates - in combination with mono- or multifunctional vinyl monomers.

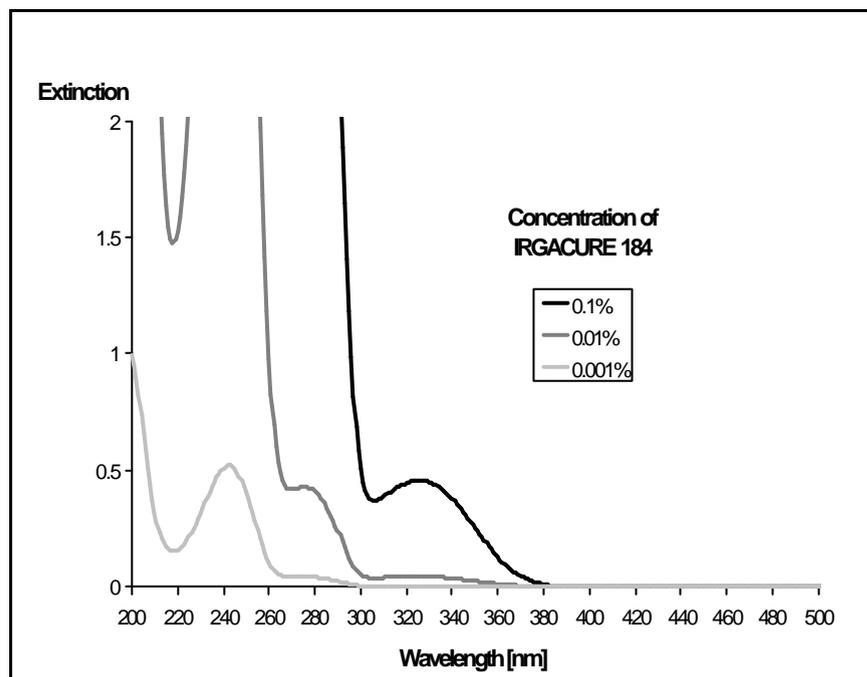
### Chemical Structure



1-Hydroxy-cyclohexyl-phenyl-ketone  
Molecular weight: 204.3

CAS No. 947-19-3

### Absorption Spectrum (% in Acetonitrille)



### Physical Properties (typical values)

Appearance: white to off-white crystalline powder

Melting point: 45-49°C

Solubility at 20°C (g/100 g solution):

acetone	> 50
butylacetate	> 50
methanol	> 50
toluene	> 50



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hexanedioldiacrylate (HDDA)	> 50
oligomeric triacrylate	~ 40
trimethylolpropanetrisacrylate (TMPTA)	43
tripropylene glycoldiacrylate (TPGDA)	43

### Application

IRGACURE 184 may be used after adequate testing for applications such as UV curable clear coatings based on acrylates for paper, metal and plastic materials.

IRGACURE 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 Ciba Specialty Chemicals' hindered amine light stabilizer TINUVIN<sup>®</sup> 292.

### Recommended concentration:

film thickness	5 - 20 $\mu\text{m}$	<b>2 - 4 % IRGACURE 184</b>
film thickness	20 - 200 $\mu\text{m}$	<b>1 - 3 % IRGACURE 184</b>

### Safety and Handling

IRGACURE 184 should be handled in accordance with good industrial practice. Detailed information is provided in the Safety Data Sheet.

### Trademark

IRGACURE is a registered trademark.

### Important Notice

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intended; or for uses for which implantation within the human body is intended.