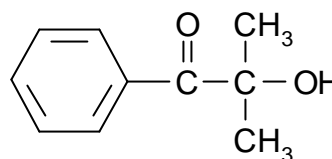


## Ciba® DAROCUR® 1173

### General

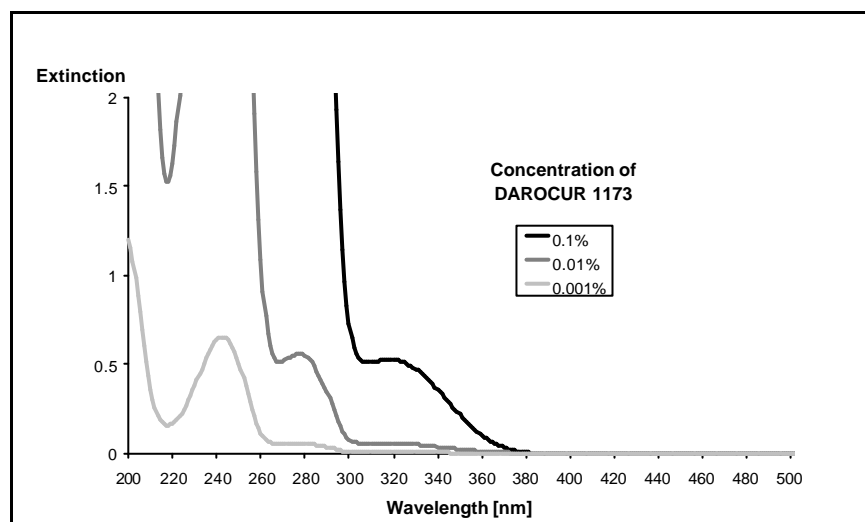
DAROCUR 1173 is a versatile highly efficient liquid photoinitiator which is used to initiate the photopolymerisation of chemically unsaturated prepolymers - e.g. acrylates - in combination with mono- or multifunctional monomers.

### Chemical Composition



2-Hydroxy-2-methyl-1-phenyl-propan-1-one  
Molecular weight: 164.2 CAS No. 7473-98-5

### Absorption Spectrum (% in Acetonitrile)



### Physical Properties

Appearance: colorless to slightly yellow liquid

Odor: slight

Miscibility: in most common organic solvents as well as most acrylate based monomers exceeds 50g/100g; practically insoluble in water.

Melting point: 4°C

Boiling point (at 0.13 mbar ~ 0.1 Torr): 80 - 81°C

Flashpoint: > 100°C

Density : 1.08 g/cm<sup>3</sup>



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Viscosity (at 20°C):

25 mPa·s

## Application

DAROCUR 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, DAROCUR 1173 is especially easy to incorporate. It is therefore highly suitable for blends with other photoinitiators.

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

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

### Recommended concentrations :

film thickness:	5 – 20 µm	<b>2.0 – 4.0 % DAROCUR 1173</b>
film thickness:	20 – 2000 µm	<b>1.0 – 3.0 % DAROCUR 1173</b>

## Safety and Handling

DAROCUR 1173 should be handled in accordance with good industrial practice. Detailed information is provided in the Safety Data Sheet.

## Trademark

DAROCUR is a registered trademark.

## Important Notice

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## Ciba<sup>®</sup> DAROCUR<sup>®</sup> 1173

been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.