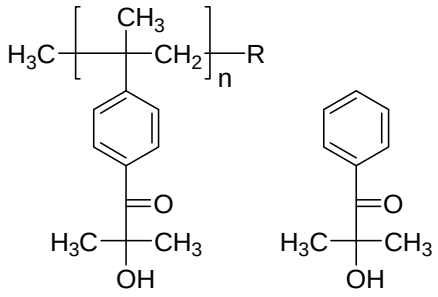
Photoinitiator for UV Radiation Curing Systems **PHOTOINITIATOR**

1. General

Chivacure® 100 is an oligomeric polyfunctional alpha-hydroxyketone photoinitiator characterized by its extremely high reactivity, low odor and non-yellowing properties. It is compatible with most acrylic-based UV systems and is ideal for extra-thin coatings where oxygen inhibition is severe. When diluted with suitable solvents or surfactants, it is also suitable for water based UV curable systems.

2. Properties

Chemical name	:	Oligo[2-hydroxy-2-methyl-1-[4-(1-methylvinyl)phenyl]propanone] and 2-Hydroxy-2-methyl-1-phenyl-propan-1-one
Structure	:	



CAS No.	:	163702-01-0 and 7473-98-5

3. Physical Data

Appearance	:	Yellow viscous liquid
Odor	:	Faint
Melting point	:	<10 °C
Boiling point	:	>200 °C
Specific gravity	:	ca. 1.10 @25 °C

4. Solubility

(g in 100 ml solvent @25 °C)

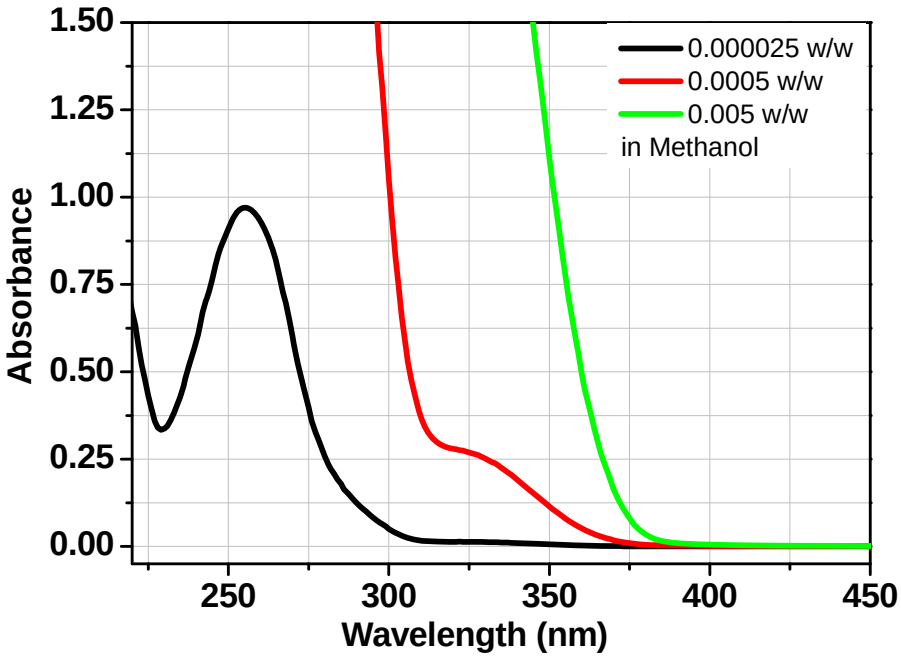
Acetone	:	>40
Toluene	:	>50
MEK	:	>40
HDDA	:	>10
TMPTA	:	>10
TPGDA	:	>20
Water	:	<0.5

5. Specification

Appearance	:	Yellow viscous liquid
Assay (HPLC)	:	95% min.
Specific gravity	:	1.07~1.13 @25 °C

Volatiles : 0.5% max.

6. UV Spectrum



7. Application

Chivacure® 100 is especially suitable for the applications when no migration, low odor and non-yellowing are required. It is recommended for below applications and the use levels range between 0.5% and 5% are recommended depending on the substrate and performance requirements of the final application.

- ❖ UV coatings and printing inks
- ❖ Adhesives and photoresists
- ❖ Printing plates
- ❖ Fiber optics

8. Storage

Chivacure® 100 is sensitive to visible light and any exposure to sunlight should be avoided. Kept at low temperature (below 25 ^{o}C) and dry conditions. Avoid contacting with heat. Opened drums should be closed after use to protect the product against light.