

PHOTOINITIATOR

DOUBLECURE[®] 200

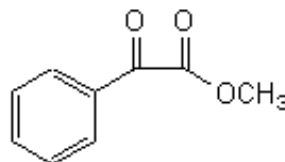
Photoinitiator for UV Radiation Curing Systems

General

DOUBLECURE 200 is a liquid-type non-yellowing photoinitiator. Good solvency properties make it ideal for making photoinitiator blends. It is the initiator of choice for coating on wood, metal and plastic as well as UV-cured adhesives where non-yellowing properties are important.

Properties

Structure:



Chemical Name	:	Methyl phenylglyoxylate
CAS No.	:	15206-55-0
EINECS No.	:	239-263-3
Molecular Formula	:	C ₉ H ₈ O ₃
Molecular Weight	:	164.2

Physical Data

Appearance	:	light yellow clear liquid
Odor	:	Faint
Melting point	:	17°C
Boiling point	:	246-248°C
Specific gravity	:	1.16 g/cm ³ @20°C

Solubility

Insoluble in water; Soluble in most organic solvents and compatible with most unsaturated pre-polymers, resins and monomers used in the UV curing industry.

Specification

Appearance	:	Light yellow and clear liquid
Assay	:	98.0 % min.
Boiling point	:	246-248°C
Benzoic acid	:	0.1 % max.

Application

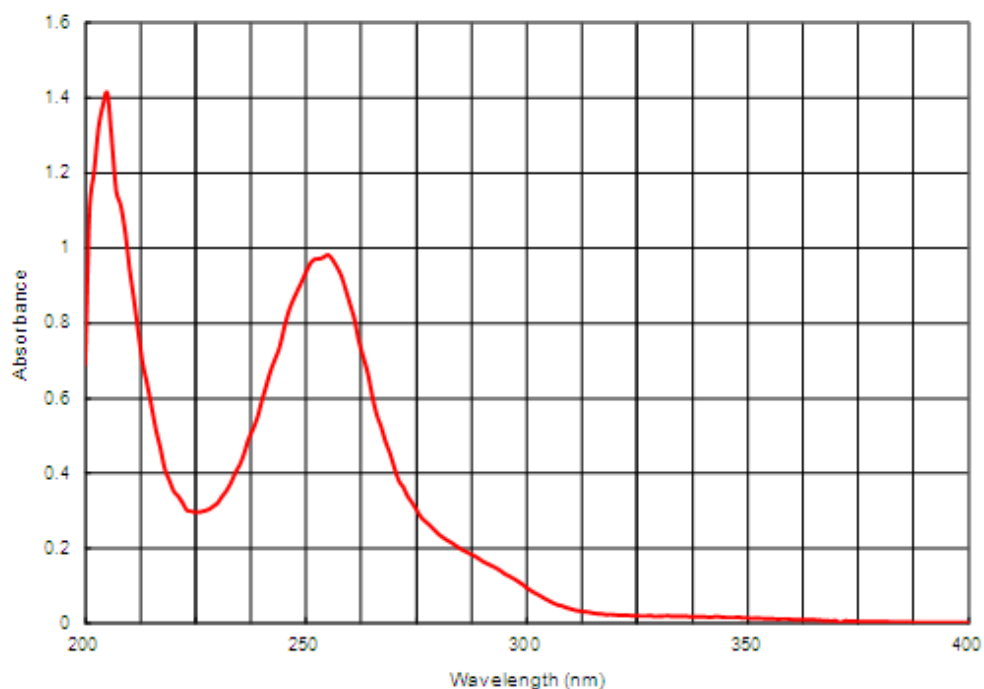
DOUBLECURE 200, when irradiating with UV light, undergoes both of a homolytic and intramolecular type of breakage to generate a pair of free radicals and a bimolecular hydrogen abstraction reaction to initiate the polymerization of UV curable systems.

Its photospeed acted as photoinitiator is not as fast as DOUBLECURE 173 for example, but it gives better non-yellowing performance and better surface curing.

The usage rates of DOUBLECURE 200 vary according to the composition of the system, source of light, line speed, and film thickness, but usually lie between 0.5 % to 2 % w/w. DOUBLECURE 200 can be used for printing ink, overprint vanishes and wood lacquers, putties and fillers for particle board.

UV Spectrum

DOUBLECURE 200



Storage

Must be stored in closed containers in dark dry conditions.

Health and Safety Information

Toxicity:

ORL-RAT LD₅₀ : >5000 mg/kg bw (rat)

Inflammability:

Flash point : >113°C (close cup)

Auto ignition temperature: : >500°C

For detailed information please consult the corresponding material safety data sheets.

DOUBLE BOND CHEMICAL
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