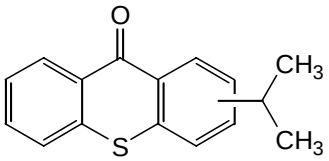
Photosensitizer for UV Radiation Curing Systems **PHOTOINITIATOR**

1. General

Chivacure® ITX is most widely used photosensitizer for pigmented UV coating systems. Its use in combination with a photoactivator such as Chivacure® EPD should give satisfied results for most of UV applications.

2. Properties

Structure :



CAS Name	:	Isopropylthioxanthone
CAS No.	:	5495-84-1 (2-isomer); 83846-86-0 (4-isomer)
EINECS No.	:	226-827-9 (2-isomer) 281-065-4 (4-isomer)
Molecular Formula	:	$C_{16}H_{14}OS$
Molecular Weight	:	254.3

3. Physical Data

Appearance	:	Pale yellow powder
Odor	:	Very Faint
Melting point	:	58 - 72 °C (depending on 4-isomer content)

4. Solubility

(% w/w @20 °C)

Water	:	< 0.01	Ethyl acetate	: 25
Acetone	:	30	1,6-Hexanediol diacrylate	: 30
Methanol	:	3.5	Trimethylolpropane triacrylate	: 10
Toluene	:	25	Propyleneglycol diacrylate	: 22
MMA	:	60	1,2-Dichloroethane	: 50

5. Specification

Appearance	:	Pale yellow to dull yellow powder
Assay (HPLC)	:	98% min.
Melting point	:	72 °C max.
Volatiles	:	0.5% max.

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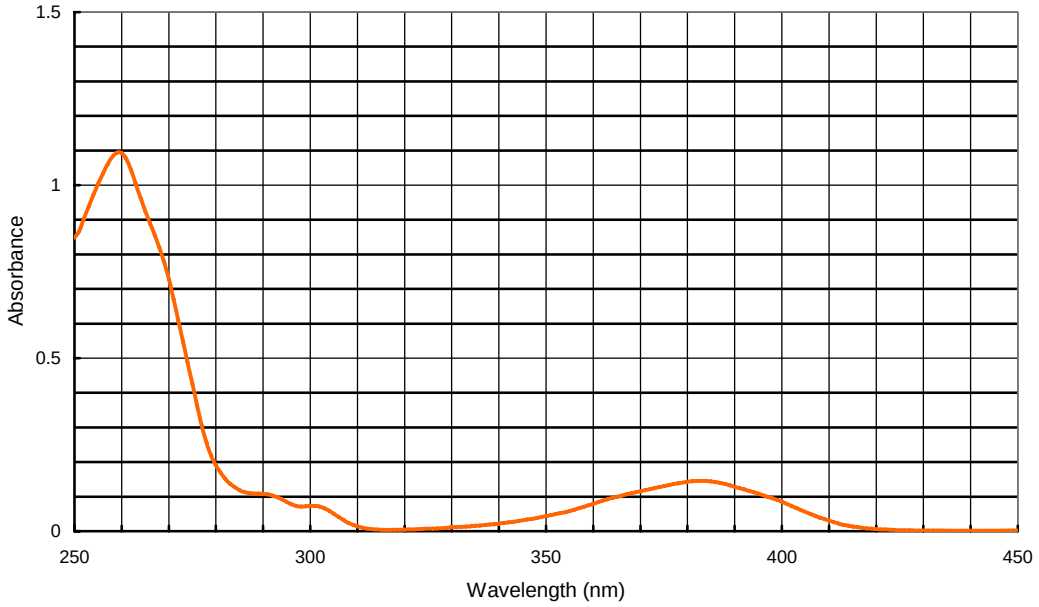
6. Application

Chivacure® ITX is the first choice for pigmented UV curing system to enhance curing properties. The usage rates of vary according to the composition of the system, source of light, line speed, and film thickness but usually lie between 0.25% to 3% w/w together with photoactivators at 2 - 5% w/w.

Applications include printing ink, decorative coating for metal cans, solder mask, and pressure sensitive sheet.

7. UV Spectrum

UV Spectrum of Chivacure ITX



8. Storage

Must be stored in closed containers in dark dry conditions.

9. Packaging

Fiber drum - 20 kg net weight

10. HS Code

2930 9090