PRODUCT DATA SHEET
CHIVACURE® 534SS

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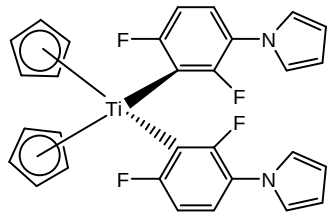
Photoinitiator for UV Radiation Curing Systems **PHOTOINITIATOR**

1. General

Chivacure® 534SS is a highly efficient, orange colored photoinitiator with good thermal stability which is able to initiate UV and/or visible light polymerization of chemically unsaturated monomers and prepolymers (e.g. acrylates). It belongs to the class of organometallic photoinitiator and can be used for both free-radical and cationic systems. Chivacure® 534SS is particularly suitable for the curing of photopolymers for imaging or information storage applications where extremely high photosensitivity is required.

2. Properties

Chemical name	:	Bis(η^5-2,4-cylcopentadien-1-yl)-bis(2,6-difluoro-3-(1H-pyrrol-1-yl)-phenyl) titanium
Structure	:	



CAS No.	:	125051-32-3
ELINCS No.	:	412-000-1

3. Solubility

(g in 100 ml solvent @25 °C)

Acetone	:	30
Toluene	:	10
MEK	:	30
HDDA	:	10
TMPTA	:	5
Water	:	<0.5

4. Specification

Appearance	:	Yellow to orange powder
Assay (HPLC)	:	98% min.
Melting point	:	160 ℃ min.
Volatiles	:	0.5% max.
Solubility (0.5g/9.5g PGMEA)	:	clear
Transmittance @650 nm (2g/8g MEK)	:	85% min.

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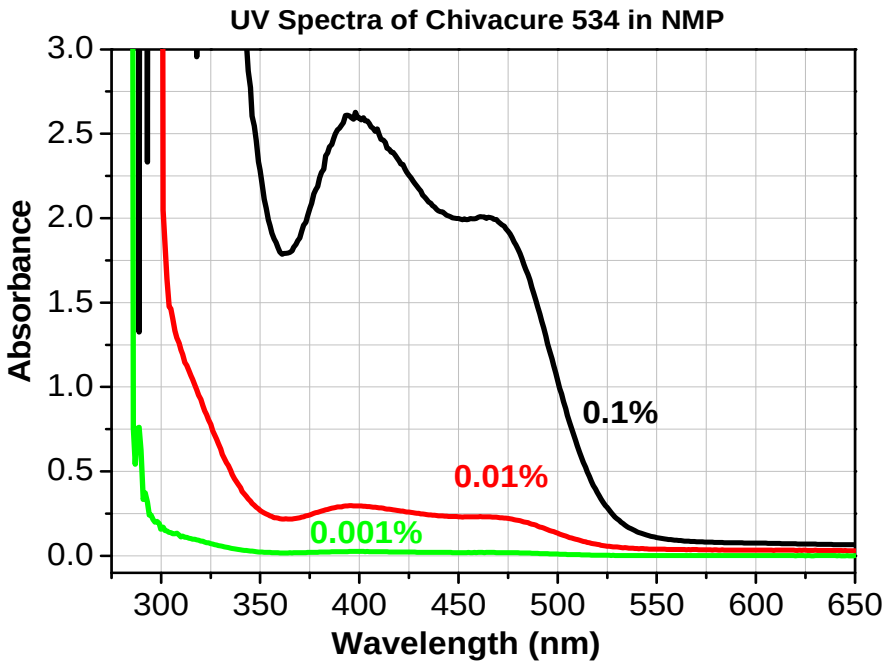
5. UV Spectrum



6. Storage

Chivacure® 534SS is sensitive to visible light and any exposure to sunlight should be avoided. Kept at low temperature (below 25 °C) and dry conditions. Avoid contacting with heat. Opened drums should be closed after use to protect the product against light. When Chivacure® 534SS is dissolved in a solvent or a formulation it is extremely sensitive to daylight and light from standard fluorescence bulbs. Any open manipulation of such systems should be carried out either in the dark or under light provided by suitable red light sources. Upon storage in solutions with presence of donor molecules (e.g. ketons, amines, cyanates and others), a slow ligand exchange reaction may occur leading to decomposition into insoluble material. The insolubles exhibit low or no reactivity as photoinitiator. The product is stable for 1 year if stored in original, sealed containers under above-mentioned conditions.

7. Packaging

10 kg net/Iron drum with inner bag