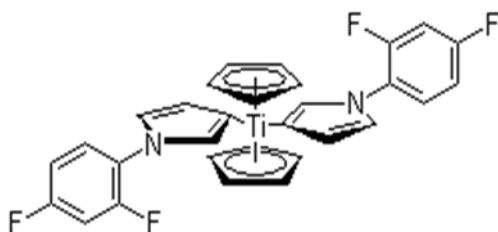


Product Data Sheet

General Information

Omnirad 784 is a reactive orange coloured solid photoinitiator used to initiate radical polymerization of unsaturated oligomers e.g. acrylates, after exposure to visible light or UV light. It can be used as the sole initiator or in combination with other initiators and mono or multifunctional monomers as reactive diluents. Omnirad 784 shows photobleaching properties and can be used in both clear and pigmented systems.

Chemical Data



Chemical Name: Bis (cyclopentadienyl) bis [2,6-difluoro-3-(1-pyrryl) phenyl] titanium
Molecular weight: 534.37 g/mol
CAS No: 125051-32-3

Specification

| | | |
|----------------------------|--------------------------------|--------------------------------|
| Appearance | Visual | Yellow to orange powder |
| Purity | HPLC analysis | ≥ 99.0 % |
| Volatiles | Loss on Drying | ≤ 0.5 % |
| Melting range | Melting Point apparatus | 165 - 170 °C |
| Clarity of solution | Visual | Clear |

Application

Omnirad 784 may be used, after adequate testing, in applications such as photopolymers for imaging or information storage e.g. resists, printing plates, optical layers, holograms, laser direct imaging, stereolithography. Formulated product properties will depend on the actual reactive monomers, oligomers and additives utilized.

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Features & Benefits

Omnirad 784 The product has peak absorbance at 390nm and 460nm, although absorbance can also extend up to 500nm.

In order to get the best curing performance oxygen should be excluded from the resin system during curing.

Recommended Addition levels

An addition level of 0.1 - 5% by weight of total formulation is recommended for technical applications.

Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight. When dissolved in a solvent or formulation Omnirad 784 it is extremely sensitive to daylight and light from standard fluorescence bulbs. Any open handling 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.ketones, amines, cyanates), a slow ligand exchange reaction may occur leading to decomposition into insoluble material. These insolubles exhibit low or no reactivity as a photoinitiator.

Avoid contact with alkaline additives and water. Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 24 months.

Omnirad 784 should be handled in accordance with good industrial practice. Further information is provided in the material safety data sheet which is available on request.

Regulatory Status

All information can be found on MSDS (Material safety data sheet) and RIS (Regulatory Information Sheet) available upon request.

Packaging

Omnirad 784 is available in 8 kg drums.

Disclaimer:

The information presented in this data sheet is given in good faith and is based on the material available to us at the time of writing. The information is not to be taken as a warranty or representation for which we assume legal responsibility, nor as permission or recommendation to practice any patented invention without a license. It is offered solely for consideration, investigation and verification.

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