

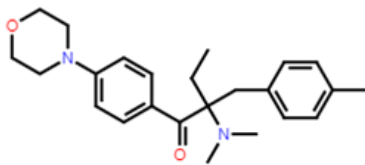
Product Data Sheet

General Information

Omnirad 379 is a highly efficient UV-curing agent used to initiate the photo polymerization of unsaturated prepolymers in combination with mono- or multifunctional monomers.

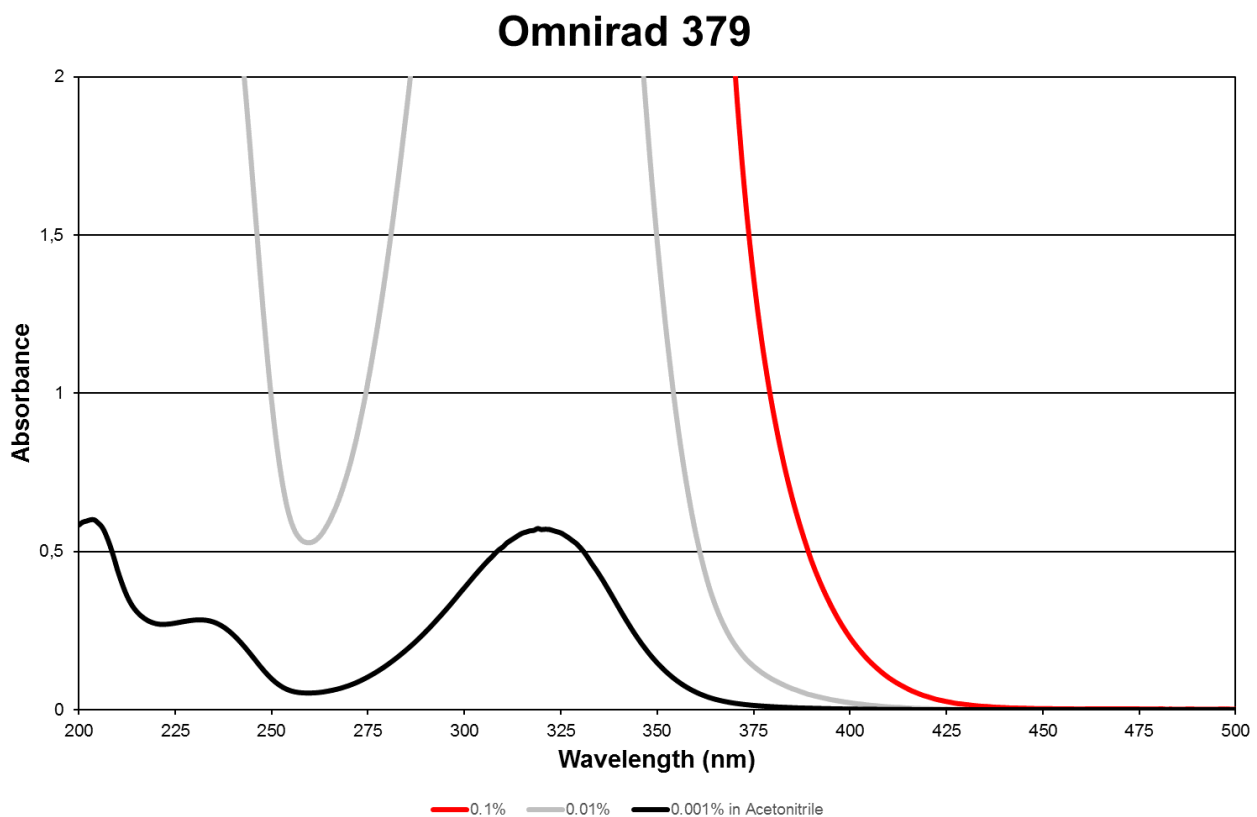
Omnirad 379 is especially suitable for pigmented UV-curable systems, photoresists and printing plates. Its excellent solubility (compared to Omnirad 369) makes it easy to incorporate into nearly all formulations.

Chemical Data



Chemical Name: 2-dimethylamino-2-(4-methyl-benzyl)-1-(4-morpholin-4-yl-phenyl)-butan-1-one
Molecular weight: 380.5 g/mol
CAS No: 119344-86-4

Absorption Spectrum



Specification

Appearance	Visual	Slightly yellow powder
Purity	HPLC analysis	≥ 96.0 %
Volatiles	GC analysis	≤ 0.5 %
Transmittance @ 450 nm	Spectrophotometer, 10g/100ml Toluene	≥ 80.0 %
Transmittance @ 500 nm	Spectrophotometer, 10g/100ml Toluene	≥ 90.0 %
Clarity of solution	Visual, 10g/100ml Toluene	Clear
Moisture content	Karl Fischer	≤ 0.3 %

Additional Typical Properties

Melting point	88 – 93 °C
Solubility at 20 °C (68 °F)	
acetone	> 50 % by weight
hexanediol diacrylate (HDDA)	~ 30 % by weight
tripropylenglycol diacrylate (TPGDA)	~ 24 % by weight

Application

Omnirad 379 may be used, after adequate testing, alone or in combination with suitable co-initiators such as Omnirad 184, Omnirad 651 or Omnirad ITX for UV-curable inks, varnishes and resist formulations for applications on paper, metal and plastic materials.

Applications in graphic arts (e.g., offset and screen inks, printing plates, etc.) and in the electronics industry (e.g., photoresists for the production of color filters or other display applications and for solder resists, etc.) are of particular interest.

The solubility of Omnirad 379 is substantially improved over that of Omnirad 369, allowing Omnirad 379 to be used in applications where the solubility of Omnirad 369 does not suffice.

Formulated product properties will depend on the actual reactive monomers, oligomers and additives utilized.

Recommended Addition levels

The amount of Omnirad 379 required for optimum performance should be determined in trials covering a concentration range :

offset inks	2.0 – 4.0 %
screen inks	2.0 – 4.0 % + 1.0 – 3.0 % Omnirad 184
pigmented coatings	1.0 – 4.0 %
photo polymers for imaging	0.5 – 5.0 %

Storage & Handling

Storage must be in a cool, shaded, well ventilated and dry area away from direct sources of heat and sunlight.

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 36 months.

Omnirad 379 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 379 is available in 20 kg carton.

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.

EUROPE
IGM Resins B.V. (Head office)
T : +31 416 316 657
sales@igmesins.com

NORTH AMERICA
IGM Resins USA Inc.
T : +1 630 2131616
sales@igmesins.com

ASIA-PACIFIC
IGM Resins Shanghai Co., Ltd.
T : +86 21 5208 0993

IGM Resins Taiwan Ltd.
T : +886 342 75275

IGM Japan GK
T : +81 3 5219 1502
sales@igmesins.com

SOUTH AMERICA
Quiminutri Comercio de
Especialidades Químicas S.A.
T : +55 19 3856 4480
comercial@igmesins.com.br