Omnirad 907
Photoinitiator

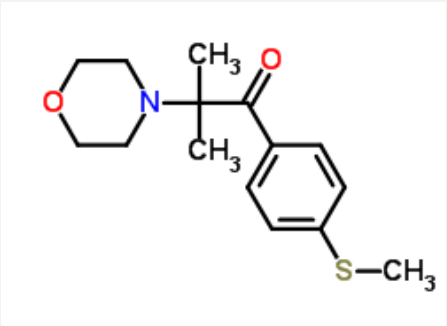
Product Data Sheet

General Information

Omnirad 907 is a highly efficient photoinitiator which is used to initiate the photo polymerization of unsaturated prepolymers, e.g., acrylates, in combination with mono- or multifunctional vinyl monomers.

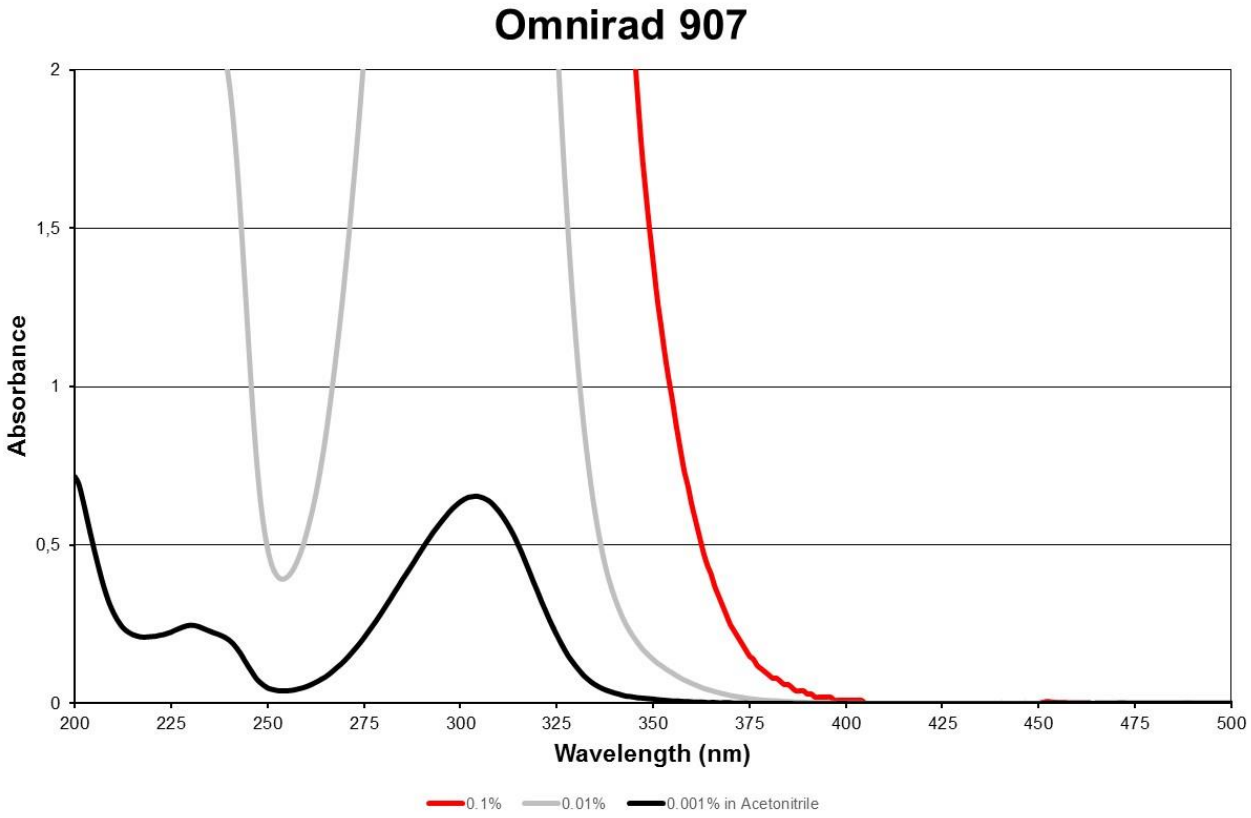
Omnirad 907 is especially suitable for pigmented UV-curable systems.

Chemical Data



Chemical Name: 2-Methyl-1-[4-(methylthio)phenyl]-2-morpholino propan-1-one
Molecular weight: 279.4 g/mol
CAS No: 71868-10-5

Absorption Spectrum



Specification

Appearance	**Visual**	**White to slightly beige powder**
Purity	**GC analysis**	**≥ 98.0 %**
Volatiles	**Loss on Drying**	**≤ 0.25 %**
Transmittance @ 425 nm	**Spectrophotometer, 10g/100ml Toluene**	**≥ 75.0 %**
Transmittance @ 500 nm	**Spectrophotometer, 10g/100ml Toluene**	**≥ 90.0 %**
Clarity of solution	**Visual, 10g/100ml Toluene**	**Clear**

Additional Typical Properties

Solubility at 20 °C (68 °F)

butyl acetate	~ 35 % by weight
hexanediol diacrylate (HDDA)	~ 35 % by weight
trimethylolpropane triacrylate (TMPTA)	~ 20 % by weight
tripropyleneglycol diacrylate (TPGDA)	~ 22 % by weight

Application

Omnirad 907 may be used, after adequate testing, alone or in combination with suitable co-initiators such as Omnirad 184 or photosensitizers such as thioxanthones for UV-curable inks and varnishes for applications on paper, metal and plastic materials. Its high absorbance makes it especially suitable for UV-curable inks and pigmented coatings.

Imaging applications in the graphic arts (e.g., offset and screen inks, printing plates, etc.) and in the electronics industry (e.g., photoresists, solder masks, etc.) may be of specific interest.

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

Recommended Addition levels

The amount of Omnirad 907 required for optimum performance should be determined in trials covering a concentration range :

offset inks	4.0 – 6.0 %
screen inks	2.0 – 4.0 % + 0.2 – 0.5 % Omnirad ITX
clear coatings	0.1 – 1.0 % + 2.0 – 3.0 % Omnirad 184
photoresists	3.0 – 6.0 %

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 907 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 907 is available in 20 kg cartons.

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