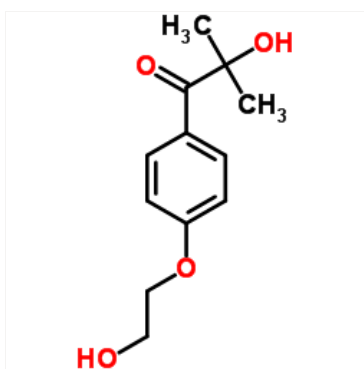


Product Data Sheet

General Information

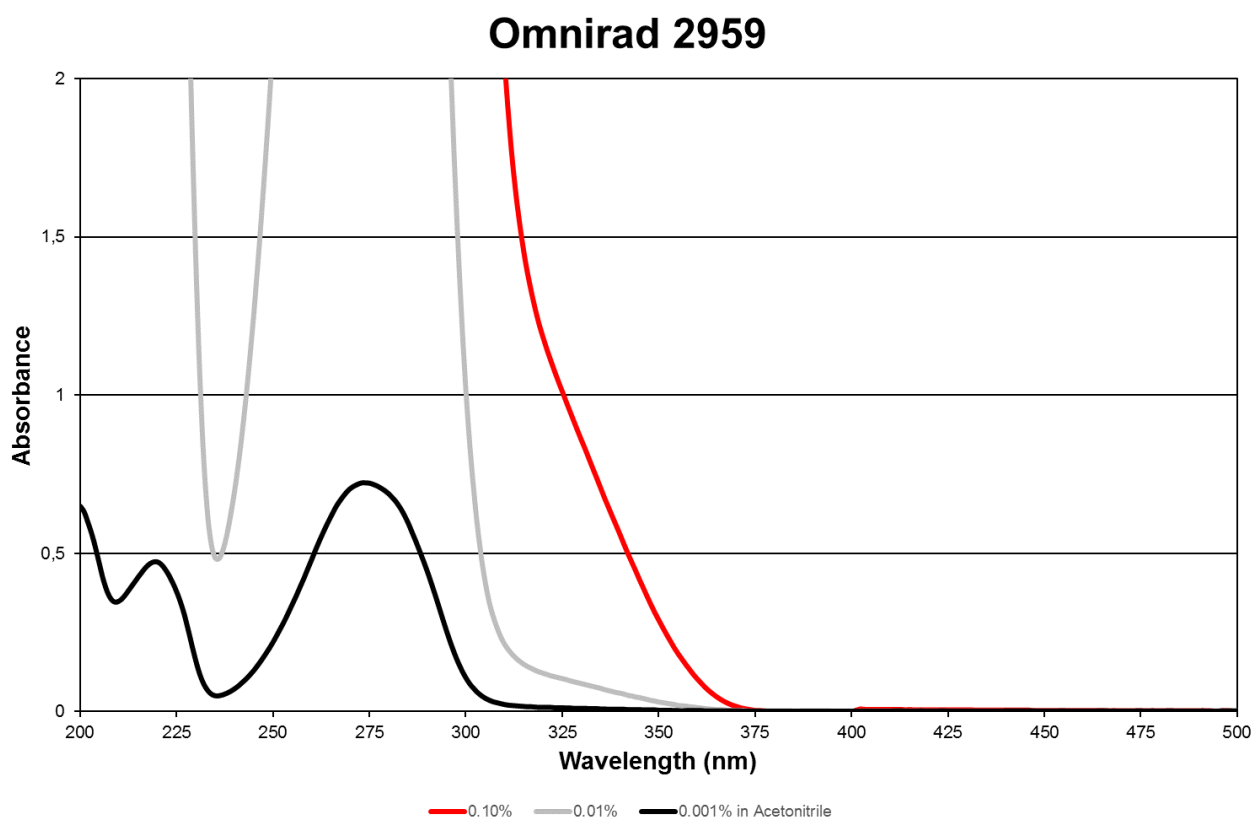
Omnirad 2959 is a highly efficient non-yellowing Type I photoinitiator for the UV curing of systems comprising of unsaturated monomers and prepolymers. It is especially suited where low odor is required and for use in water-borne systems based on acrylate or unsaturated polyester resins. The active hydroxy group can be reacted with suitable functionalized unsaturated resins

Chemical Data



Chemical Name: 1-[4-(2-Hydroxyethoxy)-phenyl]-2-hydroxy-2-methylpropanone
Molecular weight: 224.3 g/mol
CAS No: 106797-53-9

Absorption Spectrum



Specification

Appearance	Visual	White to slightly yellow powder
Purity	HPLC analysis	≥ 97.0 %
Volatiles	Loss on Drying	≤ 0.5 %
Transmittance @ 425 nm	Spectrophotometer, 10g/100ml Methanol	≥ 80.0 %
Transmittance @ 500 nm	Spectrophotometer, 10g/100ml Methanol	≥ 95.0 %
Clarity of solution	Visual, 10g/100ml Methanol	Clear
Moisture content	Karl Fischer	≤ 0.5 %

Additional Typical Properties

Melting point (dependent on method)	86.5 – 89.5 °C (187.7 – 193.1 °F)
Solubility at 20 °C (68 °F)	
butyl acetate	~ 3 % by weight
hexanediol diacrylate (HDDA)	~ 5 % by weight
trimethylolpropane triacrylate (TMPTA)	~ 5 % by weight
tripropylene glycol diacrylate (TPGDA)	~ 5 % by weight

Application

Omnirad 2959 may be used in UV curable formulations on substrates like wood, metal, plastic and paper. The hydroxy functional group enhances the compatibility of Omnirad 2959 in water-borne coating formulations.

Omnirad 2959 demonstrates low volatility and low odor as a pure substance as well as in cured films, compared to other commercially available photoinitiators

Due to its unique secondary properties Omnirad 2959 is especially recommended when high temperatures and air circulation are required for water evaporation prior to UV curing of the coating and for formulations where minimum residual odor is required, e.g., in printing onto food packaging. Formulated product properties will depend on the actual reactive monomers, oligomers and additives utilized.

Recommended Addition levels

The amount of Omnirad 2959 as supplied required for optimum performance should be determined in trials covering a concentration range : 2 – 5 %.

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 2959 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 2959 is available in 20 kg cartons.

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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