
Technical Information

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Uvinul[®] 3049

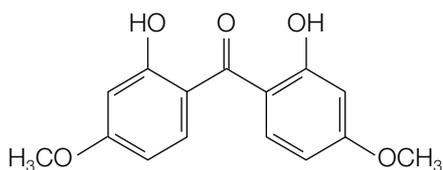
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BASF Aktiengesellschaft

UV absorber for plastics and paints

Uvinul 3049

Nature

UV absorber
2,2-Dihydroxy-4,4-dimethoxybenzophenone



$C_{15}H_{14}O_5$

Molecular mass

274

CAS no.

131-54-4

Physical form

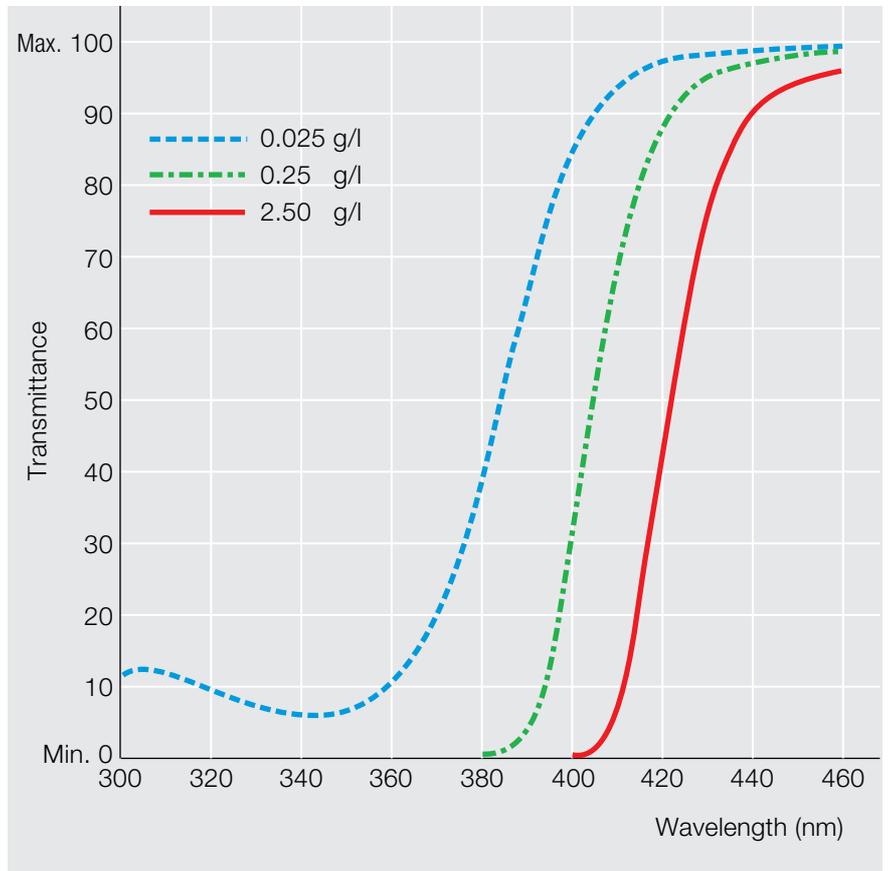
Pale yellow powder

Storage

Keep product dry and protect containers from damage. Reseal containers tightly after use.

Properties

Melting range	129–139 °C
Density at 25 °C	1.34 g/cm ³
Solubility (wt.% at 30 °C)	
Water	insoluble
Methanol	< 1
Ethyl acetate	5
Methyl ethyl ketone	5
Toluene	5



Transmittance spectra (methanol, 1 cm cuvette)

Application

Uvinul 3049 is an efficient UV absorber for polyester film, which it protects from premature damage, particularly under severe exposure conditions.

The polyester film can be treated by applying a hot solution of Uvinul 3049 in a polyhydric alcohol.

The transmittance of film treated in this manner is greatly reduced for light of wavelengths less than 400 nm, thus allowing the film to be used as a UV filter.

	% Transmittance at		
	380	400	420 nm
Untreated film	78	80	82
Film treated with Uvinul 3049	8	33	75

Other fields of application are:

- Allyl carbonate (spectacle lenses, 0.3%)
- Rubber
- PUR furniture paints and varnishes (0.50–1.00%)
- Textile industry (as a light stabilizer that is taken up by the fibres in the dye bath).
- Photographic emulsions
- Acrylic resins
- Alkyd resins
- Epoxy resins
- Cellulose nitrate
- Phenolic resins
- Fluorescent pigments
- PUR systems
- Oil paints
- Polymer dispersions

Safety

BASF knows of no ill effects that could have resulted from using Uvinul 3049 for its intended purpose in accordance with sound manufacturing practice.

According to the experience we have gained over many years and other information at our disposal, Uvinul 3049 is not harmful to health, provided that it is used properly, due attention is given to the precautions necessary for handling chemicals, and the information and advice given in our Safety Data Sheets are observed.

Note

The information submitted in this publication is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.

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