Technical Information

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Plastic Additives



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Uvinul® 3039

Liquid Cyanoacrylate UV Absorber

Characterization

Uvinul 3039 is a liquid ultraviolet light absorber (UVA) of the cyanoacrylate class, imparting excellent light stability to a variety of polymers.

Chemical name

(2-ethylhexyl)-2-cyano-3,3-diphenyl acrylate

CAS number

6197-30-4

Chemical formula

Molecular weight

361 g/mol

Applications

Due to its good compatibility with plasticizers, Uvinul 3039 is particularly suitable for the stabilization of PVC-p and PVC plastisols. It can also be used in PUR, polyesters and PMMA.

Product forms

Slightly yellowish, clear liquid

Guidelines for use

Use levels of Uvinul 3039 range between 0.1 and 1.0%, depending on substrate and performance requirements of the final application. Uvinul 3039 can be used alone or in combination with other functional additives such as antioxidants (hindered phenols, phosphites) and HALS light stabilizers, where often a synergistic performance is observed. Extensive performance data of Uvinul 3039 alone or in combination with other additives are available in many of the substrates listed above.

Physical Properties

Melting Point -8 °C Specific Gravity (20 °C) 1.05 g/ml

Solubility (20 °C) g/100 g solution

Ethyl acetate miscible
Methanol miscible
Methyl ethyl ketone miscible
Toluene miscible
Water <0.01

Volatility (pure substance; TGA, heating rate 20 °C/min in air)

Weight Loss % Temperature °C

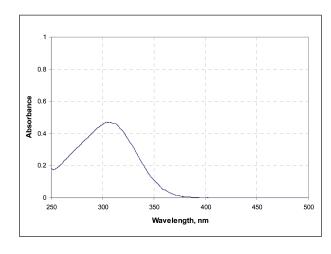
 1.0
 220

 5.0
 265

 10.0
 285

Absorbance spectrum

(10 mg/l, Chloroform)



Uvinul 3039 exhibits high absorbance in the 280–320 nm region and no absorbance in the visible region (>400 nm) of the spectrum. The absorption maximum is at 306 nm in chloroform solution.

Handling & Safety

Uvinul 3039 exhibits a very low order of oral toxicity and does not present any abnormal problems in its handling or general use.

Detailed information on handling and any precautions to be observed in the use of the product(s) described in this leaflet can be found in our relevant health and safety information sheet.

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BASF Schweiz AG Performance Chemicals/Plastic Additives Klybeckstrasse 141 4057 Basel, Switzerland

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