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Tinuvin® 326

Benzotriazole UV Absorber

Characterization

Tinuvin 326 is an ultraviolet light absorber (UVA) of the hydroxyphenyl benzotriazole class, which imparts outstanding light stability to plastics and other organic substrates.

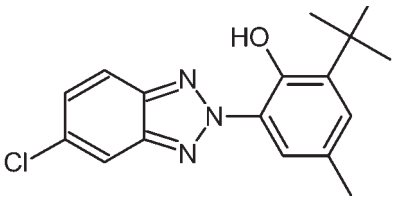
Chemical name

Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-6-(1,1-dimethylethyl)-4-methyl

CAS number

3896-11-5

Chemical formula



Molecular weight

316 g/mol

Applications

Tinuvin 326 is especially suited for polyolefins.

Features/benefits

Tinuvin 326 has a wide range of indirect food approvals in polyolefins. Its low volatility and high resistance to thermal degradation make it particularly useful in polyolefin compounding and molding processes.

Product forms

Tinuvin 326	Slightly yellow powder
Tinuvin 326 FL	Slightly yellowish rodlike granules

Recommended concentrations are:

polypropylene	0.1 % – 0.5 %
polyethylene	0.1 % – 0.4 %

Tinuvin 326 should be used in combination with a HALS light stabilizer system. Performance data for Tinuvin 326 are available in several substrates and applications.

Physical Properties

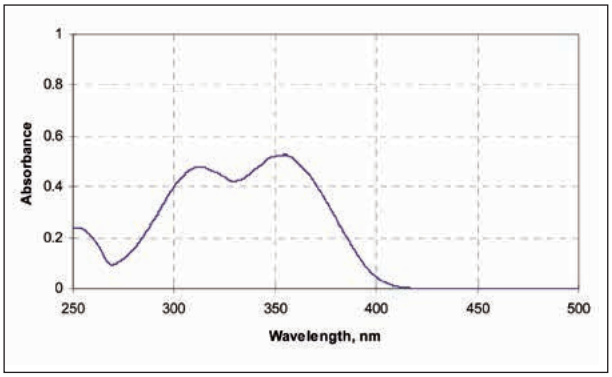
Melting Range	138 – 141 °C
Flashpoint	238 °C (DIN 51584)
Specific Gravity (20 °C)	1.32 g/ml
Bulk Density	
Tinuvin 326	0.13 – 0.20 g/ml
Tinuvin 326 FL	0.51 g/ml
Angle of Repose	
Tinuvin 326	> 51 °
Tinuvin 326 FL	34 °
Vapor Pressure (20 °C)	7.5 E-7 Pa

Solubility (20 °C)	**g/100 g solution**
Acetone	1
Chloroform	11
Ethanol	0.1
Ethyl acetate	2
n-Hexane	1
Methanol	0.1
Methylene chloride	9
Toluene	9

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

Weight Loss %	Temperature °C
1.0	180
2.0	195
5.0	220

Absorbance spectrum
(10 mg/l, Chloroform)



Tinuvin 326 exhibits strong absorbance in the 300 – 400 nm region and minimal absorbance in the visible region (> 400 nm) of the spectrum. The absorption maxima are at 312 nm and 353 nm (ε = 15600 l/mol · cm) in chloroform solution.

Handling & Safety

Tinuvin 326 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.

Note

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