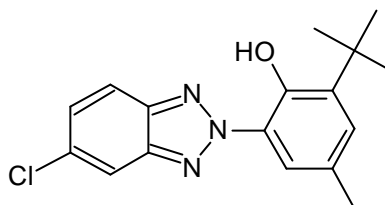




CIBA® TINUVIN® 326

Benzotriazole UV Absorber

Characterization	TINUVIN 326 is a UV absorber of the hydroxyphenylbenzotriazole class, which imparts outstanding light stability to plastics and other organic substrates.
Chemical Name/Composition	Phenol, 2-(5-chloro-2H-benzotriazole-2-yl)-6-(1,1-dimethylethyl)-4-methyl-
CAS Number	3896-11-5
Structure	TINUVIN 326



Molecular weight	315.8 g/mol	
Applications	TINUVIN 326 is especially suited for polyolefins and cold cured polyesters.	
Features/Benefits	<p>TINUVIN 326 has a wide range of indirect food approvals in polyolefins. It has a low volatility at high temperatures and high resistance to thermal degradation and can therefore be used without significant loss or decomposition in the polyolefin compounding and molding processes.</p> <p>In the use for the UV protection of polyester resins, TINUVIN 326 does not form colored complexes with the metallic salts used for the curing process of these resins.</p>	
Product Forms	Code: TINUVIN 326 TINUVIN 326 FL	Appearance: slightly yellow powder slightly yellow flakes
Guidelines for use	Polyolefins: Polyester resins:	<p>It is recommended to use TINUVIN 326 with a HALS type lightstabilizer system for best results. The recommended concentrations range for PP applications from 0.1-0.5%, for PE applications from 0.1% to 0.4%.</p> <p>The recommended levels for normal polyester resins range from 0.2% to 0.3%, while for chlorinated, flame retardant polyester resins the recommendation is 0.5%.</p>

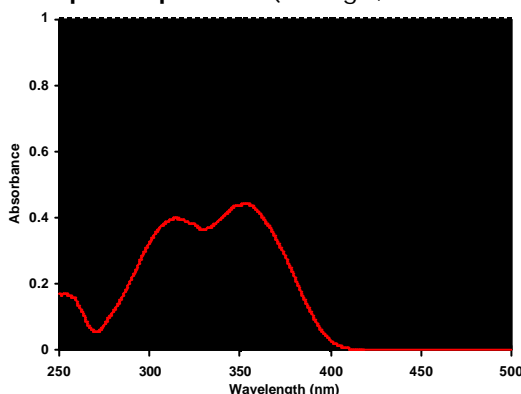
Physical Properties

Melting Range	138-141°C
Flashpoint	238°C DIN 51584
Specific Gravity (20°C)	1.32 g/cm ³
Vapor Pressure (20°C)	7.5 E-7 Pa
Bulk density	130-220 g/l
Solubility (20°C)	% w/w
Acetone	1
Chloroform	11
Ethanol	-
Ethyl acetate	2
n-Hexane	1
Methanol	0.1
Methylene chloride	9
Toluene	-

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

Temperature (°C)	% weight loss
125	0.3
150	0.4
175	0.5
200	1.0
225	3.5
250	12.1
275	35.1

Absorption Spectrum (10 mg/l, Chloroform)



TINUVIN 326 exhibits strong absorbance in the 300-400 nm region and minimal absorption in the visible region (> 400 nm) of the spectrum. The absorption maxima are at 312 nm and 353 nm ($\epsilon = 15600$ l/mol-cm) in chloroform solution.

Handling & Safety

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid continuous or repetitive breathing of dust. Use only with adequate ventilation. Prevent contamination of the environment. Avoid dust formation and ignition sources. For more detailed information please refer to the material safety data sheet.

Registration

TINUVIN 326 is listed on the following Inventories:

Australia:	AICS	Canada:	DSL	China:	First Import
Europe:	EINECS	Japan:	MITI	Korea:	ECL
Philippines:	PICCS	USA:	TSCA		

TINUVIN 326 is approved in many countries for use in food contact applications. For detailed information refer to our Positive List or contact your local sales office.

IMPORTANT:

*The following supercedes Buyer's documents. **SELLERS MAKE NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No statement herein is to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental consequential or indirect damages for alleged negligence, breach of warranty, strike liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sale liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab-work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended, for uses for which implantation within the human body is intended.*