Ciba Specialty Chemicals

Plastic Additives



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/	Phenol, 2-(5-chloro-2H-benzotriazole-2-yl)-6-(1,1-dimethylethyl)-4-methyl-	
Composition		
CAS Number	3896-11-5	
Structure	TINUVIN 326	
	215.0 s/msl	
Molecular weight	315.8 g/moi	
Applications	TINUVIN 326 is especially suited for polyoletins and cold cured polyesters.	
Features/Benefits	 IINUVIN 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. 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. 	
Product Forms	Code:	Appearance:
	TINUVIN 326	slightly yellow powder
	TINUVIN 326 FL	slightly yellow flakes
Guidelines for use	Poloylefins: Polyester resins:	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%. 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%.

	Maltin a Dava a	100 14100
Physical Properties	Meiting 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 a/l
		150 220 g/1
	Solubility (20 C)	% W/W
	Acetone	1
	Chloroform	11
	Ethanol	-
	Ethyl acetate	2
	n-Hevane	-
	Mathanal	0.1
		0.1
	Methylene chloride	9
	Toluene	-
	Volatility (pur substance; TGA-data, he	eating rate 20°C/min in air)
	Temperature (°C)	% weight loss
	125	0.3
	150	0.4
	130	0.4
	175	0.5
	200	1.0
	225	3.5
	250	12.1
	275	35.1
	Absorption Spectrum (10 mg/l. Chlor	oform)
	1	
		TINUVIN 326 exhibits strong
	0.8 -	absorbance in the 300-400 nm
		region and minimal absorption in
	* • • •	the visible region (> 400 nm) of
	5 0.0 - E	the spectrum. The absorption
	sorb	
	₽ 0.4 -	maxima are at 312 nm and 353
		nm (ϵ = 15600 l/mol·cm) in
	0.2 -	chloroform solution.
	γ / λ	
		500
	0	500
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