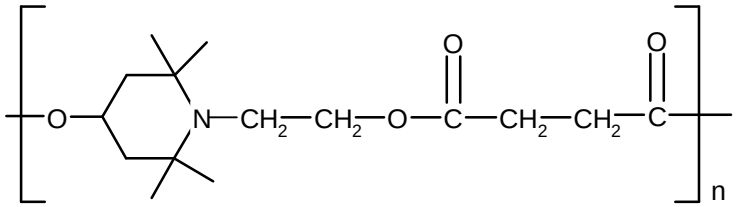
Ciba®TINUVIN®622

Oligomeric Hindered Amine Light stabilizer (HALS)

Characterization	TINUVIN 622 is the light stabilizer of choice for all applications calling for low volatility and minimal migration, because of its oligomeric structure with high molecular weight. Furthermore TINUVIN 622 is effective as antioxidant and contributes significantly to the long- term heat stability of polyolefins and tackifier resins.
Chemical Name/ Composition	Butanedioic acid, dimethylester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol
CAS Number	65447-77-0
Structure	TINUVIN 622 
Molecular weight	M_n=3100-4000
Applications	TINUVIN 622 areas of application include polyolefins (PP, PE), olefin copolymers such as EVA as well as blends of polypropylene with elastomers. In addition TINUVIN 622 is highly effective in polyacetals, polyamides and polyurethane applications.
Features/Benefits	The effectiveness of TINUVIN 622 surpasses significantly that of UV absorbers, particularly in pigmented systems. Combinations of TINUVIN 622 with UV absorbers, e.g. TINUVIN range or other HALS, e.g. CHIMASSORB range in many cases result in synergistic effects. Typical examples are TINUVIN 783 and TINUVIN 111

Product Forms	**Code:**	**Appearance:**
	TINUVIN 622 FB	colorless to light yellowish granules
	TINUVIN 622 LD	coarse, white to slightly yellow powder

Guidelines for use			
	Thick sections*	UV stabilization of HDPE, LLDPE, LDPE and PP	0.15-0.5%
	Films	UV stabilization of LDPE and LLDPE	0.1-1.2%
	Tapes	UV stabilization of HDPE and PP	0.2-0.8%
	Fibers	UV stabilization of PP fibers	0.1-1.0%

** The presence of a UV absorber (e.g. TINUVIN 326/327/328 and CHIMASSORB 81) is recommended in unpigmented or slightly pigmented articles or to improve the light fastness of certain organic pigments.*

Physical Properties	Melting Range	50 - 70 °C
	Flashpoint	>250°C Cleveland
	Specific Gravity (20°C)	1.22 g/cm^3
	Vapor Pressure (20°C)	2.5 E-6 Pa
	Bulk density	
	TINUVIN 622 FB	500 - 700 g/l
	TINUVIN 622 LD	300 - 500 g/l
	Solubility (20°C)	g/100g Solution
	Acetone	4.0
	Chloroform	> 40
	Ethanol	0.08
	Ethyl acetate	3.0
	n-Hexane	< 0.01
	Methanol	0.05
	Methylene chloride	> 40
	Toluene	15
	Water	^ 1.6 mg/l

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

Temperature (°C)	% weight loss
200	0.1
225	0.2
250	0.4
275	1.1
300	3.1
325	8.4

Handling & Safety

In accordance with good industrial practice, handle with care and 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 622 is listed on the following Inventories:

Australia:	AICS	Canada:	DSL	China:	Draft Inventory
Europe	Polymer, monomers on EINECS			Japan:	ENCS
Korea:	ECL	Philippines:	PICCS	USA:	TSCA

TINUVIN 622 is approved inmany countries for use in food contact applications. For detailed information refer to our Positive Liste or contact your local sales office.