



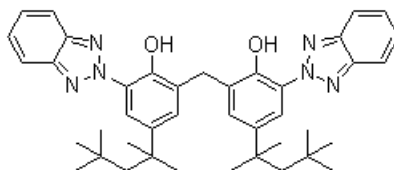
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Trade registration nr. 50769421 Chamber of Commerce Amsterdam

Technical Data Sheet

Product name: UV-360
Chemical name: 2-2'-Methylenebis[6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl) phenol]
Synonym: 2,2'-methylenebis(6-(benzotriazol-2-yl)-4-tert-octylphenol), tinuvin 360, Eversorb 78, Lowilite 36
IUPAC Name: 2,2'-methylenebis(6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol)
CAS No: 103597-45-1
EC No: 403-800-1
Molecular formula: C₄₁H₅₀N₆O₂
Molecular weight: 659
Structure formula:



Quality norm: technical grade

Specification

Appearance:	light yellow powder or pellet
Assay:	98.0% min.
Volitiles:	0.5% max
Residue on ignition:	0.1% max
Melting point:	194-198 °C
Transmissonary:	
440 nm:	97.0% min
500 nm:	98.0% min
Calcium:	11.0 ppm max.
Magnesium:	1.0 ppm max.
Aluminum:	5.0 ppm max.
Iron:	1.0 ppm max.
Zinc:	1.0 ppm max.
Strontium:	Nil
Barium:	nil

Characterization:

UV-360 is a very low volatile, dimeric 2-hydroxy benzotriazole UV-absorber used in a variety of polymers and resin compositions.

Application:

UV-360 applications include acrylic resins, polyalkylene terephthalates, polycarbonates, modified polyphenylene ether or sulfide compounds, polyamides, polyacetals, polyolefins, styrenics, elastomers and high performance plastics.

Features/Benefits:

UV-360 is particularly suitable for processing and aging conditions where high loads, low volatility and good compatibility are required. The specific objective is to achieve high UV-screen performance and minimize sublimation through vents as well as prevention of deposits on molds, chill-rolls or calibrators. It can prevent exudation/crystallization on end-parts during manufacturing or exposure to high service temperatures. Such requirements are especially critical for complex moldings, fibers, sheets, twin wall sheets, thin films, adhesive layers and laminated or co-extruded semi-finished parts. Depending on equipment, processing conditions, and polymer types, UV-360 allows direct two-layer co-extrusion of sheets without the use of a neutral third top layer to prevent sublimation and/or deposits generated by the thin, highly UVA-loaded second layer.

Guidelines for use:

UV-360 (0.2 - 10% by weight) can be readily incorporated in the polymer by using conventional techniques such as powder, solution, or melt blending (e.g. extrusion compounding). UV-360 can be used alone or in a variety of blends and combinations with other UV absorbers and antioxidants and other functional stabilizers where often a synergistic performance is observed.

Physical Properties

Melting Point	195 °C
Flashpoint	>200 °C
Density (20 °C)	1.2 g/cm ³
Vapor Pressure (25 °C)	6 E-13 Pa

Solubility (20 °C)	% w/w
Water	<0.001
Acetone	0.01
Chloroform	10
Ethanol	0.01
Ethyl acetate	0.01
n-Hexane	0.01
Methylene chloride	7.5
Toluene	3.4

Volatility	Pure substance; TGA, heating rate 20oC/min in air
Weight Loss (%)	Temperature °C
1.0	333
2.0	350

Handling and 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

UV-360 is listed on the following Inventories:

Australia:	AICS
China:	First Import
Europe:	ELINCS
Japan:	MITI
Korea:	ECL
USA:	TSCA

Packing:

In 25kg net pp bags on pallets or as required