



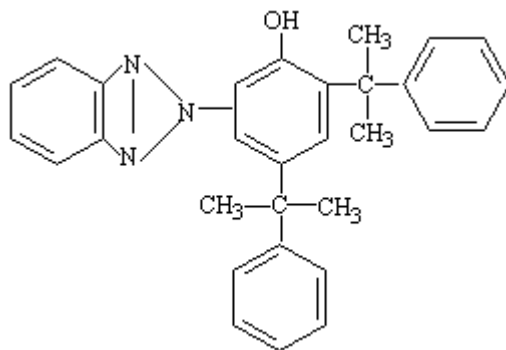
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Trade registration nr. 50769421 Chamber of Commerce Amsterdam

## Technical Data Sheet

<b>Product:</b>	<b>UV-234 - Low Volatile Benzotriazole UV Absorber</b>
<b>Characterization:</b>	UV-234 is a high molecular weight ultraviolet light absorber (UVA) of the hydroxy phenyl benzotriazole class, imparting outstanding light stability to a variety of polymers.
<b>Chemical name:</b>	2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol
<b>CAS number:</b>	70321-86-7
<b>EC Number:</b>	251-156-3
<b>Structure:</b>	



<b>Molecular weight:</b>	447.6 g/mol
<b>Applications:</b>	UV-234 is highly effective for polymers usually processed at high temperatures such as poly-carbonate, polyesters, polyacetal, polyamides, polyphenylene sulfide, polyphenylene oxide, aromatic copolymers, thermoplastic polyurethane and polyurethane fibers, where loss of UVA is not tolerated as well as for polyvinylchloride, styrene homo- and copolymers. Applications include molded articles, films, sheets and fibers.
<b>Features/benefits:</b>	UV-234 features low volatility, exceptional light absorbing characteristics and good compatibility in various substrates. This makes the product especially suitable for applications characterized by high surface area, such as films and fiber. It protects organic polymers as well as pigments from UV light, improving and preserving the technical and visual performance of such applications.
<b>Product Forms:</b>	<i>Appearance:</i> Slightly yellow powder or slightly yellow pellets
<b>Guidelines for use:</b>	The use levels of UV-234 range between 0.15 and 0.60%, depending on substrate and performance requirements of the final application. UV-234 can be used alone or in a variety of blends and combinations with

UVA and other antioxidants stabilizers where often a synergistic performance is observed.

### Physical Properties

Melting Range	138.5-141 °C
Flashpoint	> 150 °C
Specific Gravity (20 °C)	1.22 g/ml
Vapor Pressure (20 °C)	~2 E-10 Pa
Bulk Density	0.55-0.65g/cm <sup>3</sup>

<b>Solubility (20 °C)</b>	<b>% w/w</b>
Acetone	2
Chloroform	35
Cyclohexane	5
Ethanol	0.3
Ethyl Acetate	4
n-Hexane	0.6
Methanol	< 0.1
Methylene Chloride	34
Toluene	20
Water	< 0.01

<b>Volatility</b>	<b>Pure substance; TGA, heating rate 20 °C/min in air</b>
Weight Loss (%)	Temperature °C
1.0	264
2.0	280
5.0	302

### Chemical Specification:

Appearance:	White with light yellow powder or pellet
Assay:	99.0% min.
Melting point:	138.5 ~ 141.0 °C
Volatile matter:	0.5% max.
Ash content:	0.05% max.
Light transmittance:	
460 (nm):	97.0% min.
500 (nm):	98.0% min.
Zinc:	5ppm max.
Iron:	2ppm max.

### Packing:

In 20kg net PE bags on pallets or as required

### 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.

TDS UV-234 Hunan Chemical BV

Prevent contamination of the environment. Avoid dust formation and ignition sources. For more detailed information please refer to the material safety data sheet.

UV-234 is listed on the following Inventories:

Australia AICS

Canada DSL

China First Import

Europe EINECS

Japan MITI

Korea ECL

Philippines PICCS

USA TSCA

**Registration**

UV-234 is approved in many countries for use in food contact applications.