



## BLS® 1326 Ultraviolet Light Absorber & Stabilizer

**Introduction:** BLS® 1326 is a benzotriazole type ultraviolet light absorber (UVA), imparting good light stability for plastics and other organic polymers. BLS® 1326 is especially suited for polyolefins and cold cured polyesters. It protects polymers from UV radiation helping to preserve the original appearance and physical integrity, especially for polyolefins and polyester resins.

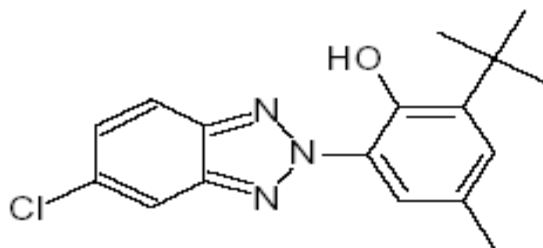
**Material Description:** Benzotriazole Ultraviolet Light Absorber

**Chemical Name:** 2-(3'-tert-butyl-2'-hydroxy-5'-methylphenyl)-5-chlorobenzotriazole

**Empirical Formula:** C<sub>17</sub>H<sub>18</sub>N<sub>3</sub>OCl

**CAS #:** 3896-11-5

**Chemical Structure:**



<b>Physical Properties:</b>	Appearance:	Slightly yellowish Powder
	Molecular Weight:	315.8
	Melting Range:	138-141°C
	Flashpoint (Ignition):	238°C BAM
	Percent Volatile:	< 0.5% Max
	Color of Toluene Solution:	Clear
	% Transmittance	460 nm - 93% Min 500 nm - 96% Min
	Specific Gravity:	~ 1.3 (H <sub>2</sub> O = 1)
	Vapor Pressure:	7.5 X 10 <sup>(-7)</sup> mm Hg, 20°C.
	Decomposition Temperature:	> 350°C

**Solubility at 20°C (g/100ml solvent):**

Solvent	Solubility
Acetone	1.0
Benzene	10.5
Chloroform	11.0
Cyclohexane	6.4
Ethyl Alcohol	0.1
Ethyl Acetate	2.0
n-Hexane	1.0
Methanol	0.1
Methylene Chloride	4.3
MEK	13.3
Toluene	11.3
Water	<0.01

**Applications:**

BLS® 1326 is especially suited for polyolefins and cold cured polyesters. In polyolefins, it has a low volatility at high temperatures and high resistance to thermal degradation for polyolefin compounding and molding applications. For best results, it should be used with a HALS type light stabilizer.

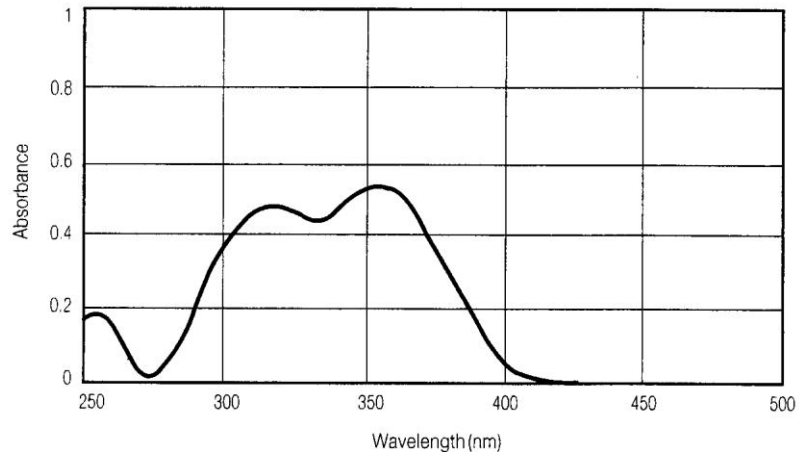
In polyester resins, BLS® 1326 does not form colored complexes with metallic curing salts. It is also good with chlorinated flame-retardant polyester resins.

**Advantages:**

- Strong absorption of ultraviolet radiation in the 300-400 nm region
- Minimal absorption in the visible region (>400 nm) of the spectrum
- Low initial color
- Low volatility during high processing temperatures
- Good extraction resistance

**Transmission Spectrum:**

**UV Spectrum in Chloroform (10mg/l)**



## **Loading**

### **Instructions:**

The loading data and results are based on laboratory work (and field-testing) under controlled conditions and do not necessarily indicate the result that the buyer or user will attain. For this reason, we strongly recommend testing of your own system under the actual conditions of processing and end-use prior to full scale testing. The general recommended loading concentration range between 0.10% and 0.50% for PP applications, between 0.10% and 0.40 % for PE applications, and between 0.20% and 0.50% for polyester resins.

### **Packaging:**

BLS® 1326 is available in powder form in a 300 kg (661.2 pound) supersack, net weight. Other packaging forms can be obtained by special order.

### **Storage:**

This product may be stored for one year in a sealed container. Containers should be stored in a cool, dry area. Extended storage at elevated temperatures or exposure to direct heat or sunlight could reduce product life. Keep containers sealed when not in use.

### **Toxicity & Safety:**

This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin, or implantation within the human body is specially intended, unless the finished product has been tested in accordance with the Food and Drug Administration and/or other applicable safety testing requirements. Because of wide range of such potential uses, Mayzo, Inc. is not able to recommend this material as safe and effective for such uses and assumes no liability for any such uses. Read and understand the Material Safety Data Sheet before using or handling this product.

### **FDA Regulations:**

BLS® 1326 has approval for indirect food contact in polyolefins. Contact your Mayzo representative for specific details.

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