BLS® 1130
Liquid UV Absorber / Light Stabilizer for Coatings and Plastics

Overview
BLS 1130 is a liquid benzotriazole UV absorber that provides outstanding light stability to industrial and automotive coatings. It blends easily and disperses completely, reducing loading requirements and virtually eliminating particle dispersion problems associated with solid UV absorbers. The liquid form is also highly compatible with a wide variety of coating systems, including waterborne and solvent-based systems. BLS 1130 is also useful as a light stabilizer in other applications including plastics, adhesives, and sealants.

Chemistry (Active Components)

Chemical Names:
- Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-hydroxy-;
- Poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxyphenyl]-1-oxopropyl]-ω-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxyphenyl]-1-oxopropoxy]-

CAS Numbers:
- 104810-48-2
- 104810-47-1

Chemical Structures:

Typical Properties

Product Form: Liquid
Molecular Weight: Mixture
Solubility (percent by weight, 20°C)

<table>
<thead>
<tr>
<th>Component</th>
<th>Solubility (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butyl carbitol</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Butanol</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Butyl acetate</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Hexanediol diacrylate</td>
<td>&gt;50</td>
</tr>
<tr>
<td>1-Methoxy-2-propyl acetate</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Methyl ethyl ketone (MEK)</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Trimethylol propane triacrylate</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Xylene</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Water</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

Applications

BLS 1130 is a liquid UV absorber providing excellent protection against ultraviolet degradation in coatings, including automotive and industrial coatings, paints, and wood stains. It is ideal for use in both water- and solvent-based systems. Combinations of BLS 1130 with hindered amine light stabilizers such as BLS 292 often provide significantly enhanced performance, providing maximum long-term protection against blistering, color change, cracking, gloss reduction, and delamination.

BLS 1130 is also ideal for use in other applications where a liquid UV absorber is preferred, including polyurethanes, adhesives, sealants, liquid color concentrates, elastomers, styrenic polymers, acrylics, PVB, flexible PVC, polyesters, polycarbonates, and polyolefins.

Advantages

- Excellent miscibility with coating solvents
- Thermal permanence and low volatility for high temperature curing
- Compatible with a wide variety of systems including waterborne
- Synergistic performance with other light stabilizers (HALS)
- Extends coatings lifetimes by minimizing defects such as loss of gloss and cracking

UV Absorbance Spectrum (20 mg/L in ethyl acetate)

![UV Absorbance Spectrum](image)

Guidelines for Use

Typical recommended use levels in coatings range between 0.5% and 3.0% based on total solids. The dispersion of BLS 1130 in waterborne coatings may be facilitated by dilution with a water miscible solvent. In plastics, adhesives, and sealants, recommended use levels range between 0.1 and 1.0%. The exact amount to be used is dependent on the substrate, performance requirements, and other factors, and should be determined by the user based on testing to simulate actual conditions of use. Please contact Mayzo for specific recommendations.

Storage

This product may be stored up to one year in a sealed container. Containers should be kept tightly closed when not in use and stored in a cool, dry place.
Safety
Please consult the Safety Data Sheet (SDS) prior to handling or using this product.

FDA Regulations
BLS 1130 has not been cleared by the FDA for use in food contact applications.