



Mayzo Makes It Possible

BNX[®] 1171

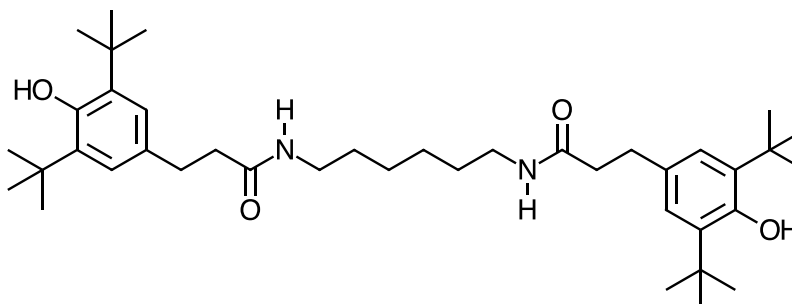
Antioxidant and Processing Stabilizer Blend for Polyamides

Overview

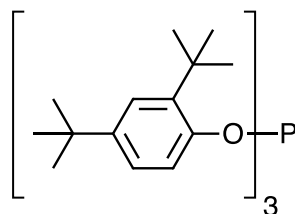
BNX 1171 is a synergistic blend of the phenolic antioxidant BNX 1098 and the phosphite Benefos[®] 1680 in a 1:1 ratio developed for the stabilization of polyamides and other polymers.

Chemistry

Chemical Names:	BNX 1098 Benzenepropanamide, N,N'-1,6-hexanediylbis[3,5-bis(1,1-dimethylethyl)-4-hydroxy- Benefos 1680 Phenol, 2,4-bis(1,1-dimethylethyl)-, 1,1',1''-phosphite
CAS Numbers:	BNX 1098 23128-74-7 Benefos 1680 31570-04-4
Chemical Structures:	BNX 1098



Benefos 1680



Typical Properties

Product Form:	Solid
Melting Range:	BNX 1098 156 – 161°C Benefos 1680 183 – 187°C
Molecular Weight:	BNX 1098 637.0 g/mol Benefos 1680 646.9 g/mol

Solubility

Please refer to the product data sheets for BNX 1098 and Benefos 1680 for solubility information.

Applications

BNX 1171 is an antioxidant blend developed for use in polyamides. Recommended applications include polyamide (PA 6, PA 6,6, PA 12) molded parts, fibers, and films. This product also improves the light stability of polyamides. Further enhancement of light stability can be achieved by using hindered amine light stabilizers and/or ultraviolet absorbers in combination with BNX 1171.

Advantages

- Provides heat stability necessary for polyamides to survive melt processing operations as well as end use at elevated temperatures
- Improves the light stability of polyamides
- Less discoloring and more resistant to extraction than copper-based stabilizers
- Low volatility
- FDA-cleared for use in polyamides

Guidelines for Use

Recommended concentrations in polyamides range from 0.1 to 1.0%, depending on the application. The use of BNX 1171 in combination with hindered amine light stabilizers (HALS) such as BLS[®] 1770 or BLS 1944 is recommended for weatherable applications requiring maximum light stability. Use of formulations additionally comprising an ultraviolet absorber such as BLS 234 is recommended in formulations containing organic pigments to improve lightfastness and reduce color changes after weathering. The exact formulation 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 two years 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

The components of BNX 1171 have been cleared for use in nylon (polyamide) resins under 21 CFR §178.2010. Please contact your Mayzo representative for complete details, including restrictions of use.

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