



Mayzo Makes It Possible

## BNX<sup>®</sup> 358

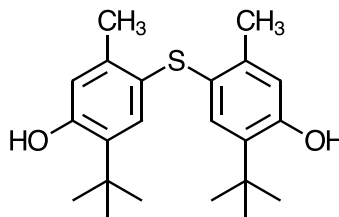
### Multifunctional Antioxidant and Disproportionation Agent

#### Overview

BNX 358 is a non-discoloring antioxidant useful for the stabilization of elastomers, plastics, adhesives, and lubricants. The product is also used as a disproportionation agent in the production of rosin esters.

#### Chemistry

Chemical Name: Phenol, 4,4'-thiobis[2-(1,1-dimethylethyl)-5-methyl-  
CAS Number: 96-69-5  
Chemical Structure:



#### Typical Properties

Product Form: Solid  
Melting Range: 160°C  
Molecular Weight: 358.5 g/mol

#### Solubility (percent by weight, 20°C)

Acetone	20	Hexane	0.5-1
Carbon tetrachloride	0.5	Methanol	79
Diethyl ether	0.5	Water	< 0.1 mg/L (25°C)
Ethanol	47		

#### Applications

BNX 358 is a highly effective antioxidant for the stabilization of elastomers (especially EPDM and polybutadiene), polyolefins (especially in pipe and in wire & cable grades), styrenic polymers, PVC, hot melt adhesives, and in lubricants. It also functions as disproportionation agent in rosin ester production.

### Advantages

- Non-discoloring and non-staining
- Good compatibility with peroxides (for example in elastomers and in polyolefin wire & cable formulations) and carbon black
- Inhibits skin formation in hot melt adhesives
- As a disproportionation agent, improves the thermal oxidative stability of rosin esters

### Guidelines for Use

The recommended loading levels in plastics, elastomers, hot melt adhesives, and lubricants range between about 0.1 and 2%. BNX 358 can also be used in combination with other additives, including antioxidants (primary and/or secondary) and light stabilizers. 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

BNX 358 is FDA-cleared for use in adhesives under 21 CFR §175.105, in polyethylene polymers under 21 CFR §178.2010, and in rubber articles intended for repeated use under 21 CFR §177.2600. Please contact your Mayzo representative for specific details, including restrictions of use.

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