



Mayzo Makes It Possible

BNX[®] 1411

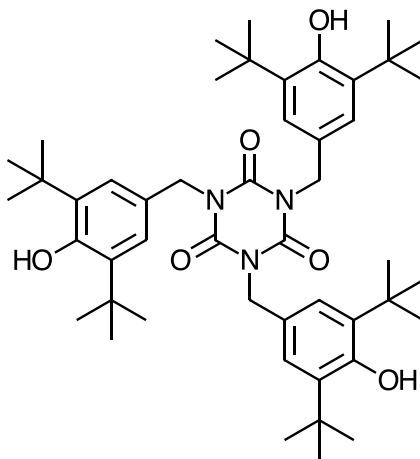
Antioxidant and Thermal Stabilizer Blend

Overview

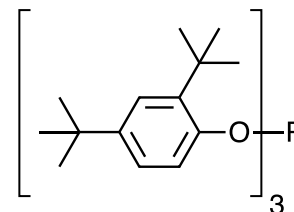
BNX 1411 is a synergistic blend of the phenolic antioxidant BNX 3114 and the phosphite Benefos[®] 1680 in a 1:1 ratio. This blend of both a primary and a secondary antioxidant provides excellent heat stability and resistance to oxidation, with good compatibility with resins and low volatility. Compared to other antioxidant blends this product provides excellent resistance to the discoloration phenomenon commonly known as "gas fading".

Chemistry

| | |
|----------------------|--------------------------------------------------------------------------------------------------------------------|
| Chemical Names: | BNX 3114 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]- |
| | Benefos 1680 Phenol, 2,4-bis(1,1-dimethylethyl)-, 1,1',1''-phosphite |
| CAS Numbers: | BNX 3114 27676-62-6 Benefos 1680 31570-04-4 |
| Chemical Structures: | BNX 3114 |



Benefos 1680



Typical Properties

| | |
|-------------------|----------------------------------------------------------|
| Product Form: | Solid |
| Melting Range: | BNX 3114 218 – 223°C Benefos 1680 183 – 187°C |
| Molecular Weight: | BNX 3114 784.1 g/mol Benefos 1680 646.9 g/mol |

Applications

BNX 1411 is a convenient blend of both a primary and secondary antioxidant. This synergistic blend addresses a broad range of stabilization needs. The resistance to “gas fading” makes it ideal for use as a melt processing stabilizer in polyolefins such as polypropylene, polyethylene, polyolefin copolymers and blends, and TPO’s. It is also ideal for use in polyolefins containing inorganic fillers (talc, glass fibers, etc.).

Advantages

- Ease and convenience for compounding operations
- Provides excellent melt stability in a wide range of polyolefins
- Phosphite component features excellent hydrolytic stability
- Resistant to “gas fading” discoloration
- Low volatility at high processing temperatures
- FDA cleared for use in polyolefins and adhesives

Guidelines for Use

Typical recommended loading concentrations in polyolefins and adhesives range between 0.05% and 0.5%. BNX 1411 is also suitable for use in combination with light stabilizers, including hindered amine light stabilizers (HALS), UV absorbers, and benzoates. 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 1411 have been FDA cleared for use in adhesives under 21 CFR §175.105 and in olefin polymers and copolymers under 21 CFR §178.2010. Please contact your Mayzo representative for complete details, including restrictions of use.

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