



## BNX® DSTDP

### Sulfur-Based Antioxidant/Heat Stabilizer for Plastics

**Introduction:** BNX® DSTDP is a thioether-type antioxidant that functions by scavenging peroxides formed during the thermal oxidative degradation of plastics and other organic materials. Combinations of this product with hindered phenolic antioxidants (*e.g.* BNX® 1010) provide outstanding thermal stability in polyolefins, styrenic polymers, and engineering plastics. BNX® DSTDP is non-discoloring, has good compatibility with polyolefins, styrenic polymers, and adhesives, and has low odor relative to other sulfur-based antioxidants.

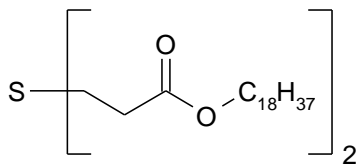
**Material Description:** Thioether Antioxidant/Heat Stabilizer

**Chemical Name:** Dioctadecyl 3,3'-thiodipropionate

**CAS #:** 693-36-7

**Molecular Weight:** 683 g/mol

**Chemical Structure:**



**Physical Properties:**

Appearance:	White to off-white flakes
Melting Point:	64-67°C
Flash Point:	257°C (Markusson)
Solubility in Water:	<0.1 mg/L

**Applications:** BNX® DSTDP is a thioether-type antioxidant recommended for use in polyolefins, styrenic polymers, and adhesives. Potential applications include mineral-filled and unfilled polypropylene, TPO, polyethylene pipe, crosslinked polyethylene power cable insulation, styrenic polymers (*e.g.* ABS, HIPS), and adhesives.

**Advantages:**

- Provides excellent thermal stability to polyolefins and other plastics when used in combination with hindered phenolic antioxidants
- Non-discoloring
- Low odor, low volatility

**Guidelines for Use:** Recommended concentrations range from 0.05 to 1%. The use of BNX® DSTDP in combination with a hindered phenolic antioxidant such as BNX® 1010 is generally recommended to provide optimal thermal stability. In such combinations, this

product provides superior performance vs. hindered phenolic antioxidants used alone. Please consult your Mayzo representative for a recommendation for your specific application. Performance data for BNX® DSTDP is also available upon request.

Please note that all technical recommendations and performance data 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 in your own formulation under the actual conditions of processing and end-use prior to full-scale testing. Furthermore, the user of the product must make its own determination and satisfy itself that the use of the product (i) is in compliance with environmental, health and safety regulations and (ii) will not infringe any third party's intellectual property rights.

**Packaging:** 110 lb fiber drum with PE liner

**Storage:** This product may be stored up to two years in sealed containers. Containers should be stored in cool, dry areas. Extended storage at elevated temperatures or exposure to direct heat could reduce product shelf life. Keep containers sealed when not in use and during transport.

**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 handling or using this product.**

**FDA Regulations:** This product has been FDA-cleared for use in food contact applications. Please contact your Mayzo representative for the latest information on the FDA status of this product.

The information contained herein is believed to be reliable. However, Mayzo, Inc. makes no warranty, whether expressed or implied, including warranties of merchantability or of fitness for a particular purpose, for the product or products referred to herein. No statements or recommendations contained herein are to be constructed as inducements to infringe any relevant patent, now or hereafter existence. Under no circumstances shall Mayzo, Inc. be liable for incidental, consequential, or other damages from alleged negligence, breach of warranty, strict liability, or any other legal theory, arising out of the use of handling of the product or products referred to herein. The sole remedy of the buyer and sole liability of Mayzo, Inc. for any claims shall be limited to the buyers purchase price of the product which is subject of the claim or the amount actually paid for each product, whichever is less. Technical advice furnished by seller shall not constitute a warranty, which is expressly disclaimed, all such advice being given and accepted at the buyers risk.