

# MAYZO

**BNX<sup>®</sup> 1077**  
**A Liquid Antioxidant & Thermal Stabilizer**



**Norcross, Georgia**  
Corporate Headquarters

6577 Peachtree Industrial Boulevard • Norcross, Georgia 30092

Phone:(770) 449-9066 • Fax:(770) 449-9070

[www.mayzo.com](http://www.mayzo.com)

**BNX<sup>®</sup> 1077**

A Liquid Antioxidant and Thermal Stabilizer

**Introduction** BNX<sup>®</sup> 1077 is a liquid sterically hindered phenolic antioxidant. BNX<sup>®</sup> 1077 is an effective, non-discoloring stabilizer that provides excellent long term stability and is a liquid. It can be used in a wide range of polymers such as PVC, ABS, & PE, rubbers such as SBR, BR, & NBR, synthetic fibers, waxes, fats and oils.

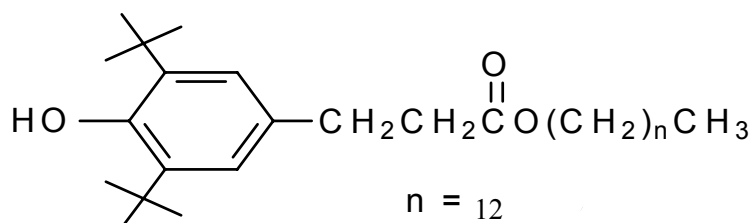
**Material Description:** Liquid Antioxidant and Thermal Stabilizer

**Chemical Name:** Benzenepropanoic acid,  
3,5-bis (1,1-dimethylethyl)-4-hydroxy-, isotridecyl ester

**Empirical Formula:** C<sub>30</sub>H<sub>52</sub>O<sub>3</sub>

**CAS Number:** 847488-62-4

**Chemical Structure:**



<b>Physical Properties:</b>	Appearance:	Viscous Liquid
	Color:	Light yellow
	Molecular Weight:	460.7
	Freeze Point:	-56 °C
	Boiling Point:	230°C (446 °F) @ 0.5 mmHg
	Vapor Pressure:	1.66 hPa @20 °C
	Percent Volatile:	< 0.5%
	Specific Gravity (H <sub>2</sub> O=1):	0.94 @ 25 °C
	Solubility in water@ 20 °C:	<0.1 ppm

**Applications** BNX<sup>®</sup> 1077 is a low viscosity liquid antioxidant that can be used as a stabilizer for a variety of polymer applications. BNX<sup>®</sup> 1077 is an excellent antioxidant for PVC polymerization, in polyols for polyurethane foam manufacturers, ABS emulsion polymerization, LDPE /LLDPE polymerization, hot melt adhesives (SBS, BR, &NBR) and tackifiers, oils and resins. The alkyl chain adds compatibility and solubility to various substrates.

**Advantages**

- No solvents due to being a liquid.
- Excellent compatibility with plastics, rubber, adhesives, and waxes.
- Excellent compatibility with fats and oils.
- Non-staining and non-discoloring.
- Improvement of long-term stability.
- Low viscosity, low volatility
- Ease of compatibility with other stabilizers

**Loading****Instructions**

The loading data and results 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 of your own system under the actual conditions of processing and end-use prior to full scale testing. The recommended loading concentrations range between 0.1 – 1.0% by weight. Exact loading must be determined by compositions of the specific polymer system.

**Packaging**

BNX<sup>®</sup> 1077 is available in a liquid form in a 185 kg (407.74 pounds) epoxy coated drum.

**Storage**

BNX<sup>®</sup> 1077 should be stored in a closed system and be kept dry.

**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 using or handling this product.

**FDA Regulations:**

For FDA approvals for indirect food contact, please contact your Mayzo representative.

**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.**