BNX® 1225 TPR
Pelletized Antioxidant Concentrate in SIS

Overview
BNX 1225 TPR is a 45% active pelletized concentrate of the antioxidant blend BNX 1225 in an SIS (styrene-isoprene-styrene) thermoplastic rubber. The BNX 1225 component is a synergistic blend of BNX 1010 and Benefos® 1680 at a 1:1 ratio, which provides excellent heat stability and oxidation resistance. It also exhibits good compatibility with resins and excellent extraction resistance. The SIS component has a styrene content of 14%, diblock content of 12% and a melt index of 9.

Chemistry (Active Components)

Chemical Names:
- BNX 1010
  Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)4-hydroxy-, 1,1'-[2,2-bis[[3-[3,5-bis(1,1-dimethylethyl)4-hydroxyphenyl][1-oxoproxy]methyl]-1,3-propanediyl] ester
- Benefos 1680
  Phenol, 2,4-bis(1,1-dimethylethyl)’, 1,1’,1”-phosphite

CAS Numbers:
- BNX 1010 6683-19-8
- Benefos 1680 31570-04-4

Chemical Structures:

Typical Properties
Product Form: Solid
BNX 1225 Content: 43 – 47% by weight
Pellet Weight: 0.6 – 1.2 g/50 pellets

Applications
BNX 1225 TPR is a 45% active concentrate of BNX 1225 in SIS provided in a convenient pelletized form. This product is recommended for use in the manufacture of hot-melt pressure sensitive adhesives (HMPSA) using single or twin-screw extruders. This unique product can also be used with sigma mixers to achieve a more uniform dispersion of the antioxidant in the HMPSA. BNX
1225 TPR is compatible with a wide range of SIS grades such as Quintac® 3620, Kraton® D1161P, Kraton® D1193, and Vector® 4113.

Advantages
- Accurate dispensing in loss-in-weight feeders (i.e. K-TRON®)
- Uniform pellet shape and size
- Non-friable pellets that are durable enough for air conveying
- High melt resistance / non-bridging or blocking
- Increased processing efficiency
- Reduced handling time
- Improved product dispersibility in extruders and sigma mixers
- Compatible with standard antioxidant metering equipment
- Minimal screw slippage
- Improved hygiene
- Low dusting form minimizes hazards associated with dust generation and accumulation
- Excellent compatibility with styrenic polymers, engineering plastics, polyurethanes, and PVC
- Low volatility
- FDA cleared for use in adhesives

Guidelines for Use
Typical recommended loading concentrations in HMPSA range between 0.4% and 2% (0.2–1% based on the BNX 1225 active component). 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 1225 TPR have been cleared for use in adhesives under 21 CFR §175.105. Please contact your Mayzo representative for complete details, including restrictions of use.

Quintac® is a registered trademark of Nippon Zeon Co., Ltd.; Kraton® is a registered trademark of Kraton Polymers US, LLC; Vector® is a registered trademark of TSRC Corporation; and K-TRON® is a registered trademark of K-Tron Technologies, Inc.