
Performance BIB
BIB for Syrup

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■ Presentation Outline

- Package usage
- Test procedures
- Specifications
- Quality Issues



■ BIB Usage

- **Used for syrup for fountain accounts**
 - ◆ Not currently used as a consumer package
 - ◆ About 90% of Fountain business is BIB



■ Sizes

- 1.0, 2.5 and 5 gallon in North America
- 5, 10, 20 and 250L in Europe

■ Products

- Mostly beverage syrups
- Some shelf-stable preserved juices
- Some frozen juice concentrates

■ Shelf-life

- 75 days, stored between 40-77degrees F



BIB Considerations

- **Fountain outlet is the customer**
- **Environmentally friendly**
- **Tamper-evidence**
- **Quality, Quality, Quality**



■ BIB Specifications and Test Procedures

- **Regulatory approval of material**
 - ◆ Certificates of food law compliance
- **Taste test (control package)**
 - ◆ Formula compatibility
- **Bag film thickness**
- **Evacuation**
- **Package Drop**
- **Package Compression**



■ BIB Specifications and Test Procedures (cont.)

- Package stacked vibration
- Package loose load vibration
- Package drop
- Palletized package transport
- Single package transport
- Top Load resistance



■ BIB Quality

- Pinhole leakers/stress cracking
- Need for metalized bags for some sensitive products (wouldn't pass sensory testing in regular LLDPE)
 - ◆ Need O₂ barrier for juices
 - ◆ Acid in juice can degrade metalized film
 - ◆ As bag strength decreases it tends to crinkle
 - ◆ This results in stress cracks in the thin metallic layer which can lead to pin holes



● **BIB Quality**

◆ Pinholes in LLDPE bags

- Had to set up training classes for plants and distributors on how to handle packages
- Reviewed fillers,
- SS parts—no rough or sharp edges
- Handling shutes—make sure no rough edges, no loose screws
- Need to palletize correctly—no sloping areas, not too high to squash boxes.
- If distributors wash storage area, and boxes get wet, can disintegrate and cause pinholes in bags



■ BIB Quality Issues

● Spout

- ◆ Needs to be sealed properly to avoid any leaks

● Taste, taste, taste

- ◆ O₂ ingress
- ◆ Flavor absorption

● Other than package

- ◆ Thermal abuse
- ◆ Syrup ratios
- ◆ CO₂ levels
- ◆ Amount of ice
- ◆ Water Quality
- ◆ Sanitation