



Model Bale Specifications: HDPE Natural Bottles

This model specification provides industry-developed guidelines for recycling market acceptance of this baled commodity. It is not intended to replace the specifications of individual buyers that may allow or prohibit different contents or bale sizes. It provides a benchmark for sellers for producing quality recycled plastic baled commodities.

Any whole, blow-molded, high density polyethylene (HDPE) bottle containing the ASTM D7611 “#2, HDPE” resin identification code that is unpigmented, and was generated from a curbside, drop-off, or other public or private recycling collection program. Bottles are defined as containers that have a neck or mouth that is smaller than the base.

All bottles should be free of contents or free flowing liquids and direction should be provided to encourage consumers to empty and rinse containers. While including closures (caps, lids, and rings) on bottles is acceptable, removal of closures is also acceptable. Loose caps and closures should not be added to the bale.

ITEMS RESULTING IN A DOWNGRADE TO COLORED HDPE BALE: Inclusion of pigmented or colored HDPE bottles will downgrade a Natural Bottle Bale to a Colored HDPE Bottle Bale.

- Pigmented white and yellow HDPE (#2) milk jugs
- Other pigmented HDPE (#2) bottles and containers

CHECK WITH YOUR BUYER(S) as to their allowances for:

- HDPE Cooking oil bottles

Total contamination should not exceed 5% by weight. Contamination exceeding 5% may reduce bale value. The lower the % of contamination the higher the value of the bale; higher levels of contamination is potential for downgrade or rejection.

ALLOWABLE CONTAMINANTS AT LOW LEVELS: These contaminants are tolerable at low levels. None of the following individual contaminants should exceed 2%, by weight, unless noted otherwise. Excessive levels may reduce bale value.

- Liquid residues
- Loose paper or cardboard (OCC)
- Aluminum cans
- Any other HDPE (#2) rigid plastic
- Any non-HDPE rigid plastic bottle, container or packaging, including PET (#1), LDPE (#4), PP (#5), PS (#6), Other (#7) and compostable plastic (e.g. PLA and PHA) (2% maximum of all combined)

CONTAMINANTS NOT ALLOWED: *If present, these contaminants may result in rejection.*

- Any item with degradable additives
- Containers which held hazardous materials, such as flammable, corrosive or reactive products, pesticides or herbicides



- Any PVC (#3) rigid plastic bottle, container or packaging
- Any bulky rigid plastic
- Any plastic bags or film
- Any plastic foam
- Other metal, wood, glass
- Batteries
- Electronics scrap, including items with circuit boards or battery packs
- Bio-Medical non-bottle waste/items (e.g. syringes, sharps, gloves, masks)
- Rocks, stones, mud, oils, grease

IMPORTANT: Any plastic container that previously contained any hazardous or potentially hazardous material, including needles, should be strictly avoided. Many purchasers will reject an entire load if any of the above materials are found and will return them at the seller's expense.

Bale Size/Minimum Shipping Weight/ Tare Weight: Bales should be a minimum of 30"x42"x 48". Bale sizes should allow a minimum of 35,000 pounds to be shipped on 48 foot trailer. Individual companies may apply price deductions for shipments that do not meet their minimum weight requirements. A tare weight of 8 pounds per bale may be taken from the gross weight for baling wire.

Bale Density: 15-20 lbs/ft³

Bale Integrity: Bale integrity must be maintained throughout loading, shipping, unloading and storage.

Bale Wire: Bales should be held together with 10-12 gauge, noncorrosive galvanized metal wire and with all bale wires wrapped in one direction (crisscrossing or double strapping should be preapproved by the buyer before shipping). A minimum number of bale wires should be used to maintain bale integrity. This number will vary with bale size and density.

Other Bale Wrap or Binding: Plastic wrap, cardboard headers, or other additional binding beyond bale wire should not be used.

Storage: Bales should be stored, with the bottom bale on a pallet, indoors or covered outdoors. Material must not be stored outdoors uncovered for a period exceeding four (4) weeks to prevent UV degradation from direct sunlight and moisture contamination.

DOCUMENT VERSION HISTORY

Publication Date	Revision notes
September 2022	