The Association of Plastic Recyclers

Model Bale Specification: PET Bottles with PET Thermoforms

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 polyethylene terephthalate (PET) postconsumer bottle or jar with a screw-neck top that contains the ASTM D7611 "#1, PET or PETE" resin identification code and that is clear, transparent green, or transparent light blue. All bottles should be free of contents or free flowing liquids. Closures (caps, lids, rings and labels) may be left on bottles.

This specification allows inclusion of PET thermoforms of more than two percent, but not to exceed 10 percent of bale, by weight. PET thermoforms are defined as any whole, extrusion grade, clear polyethylene terephthalate (PET) package labeled with the ASTM D7611 "#1, PET or PETE" resin identification code, including and not limited to egg cartons, baskets, clamshell containers, cups, lids, cake domes, covers, blister pack without paperboard backing, tubs, deli containers, trays and folded PET sheet containers. All thermoform pieces must be optically sorted (as PET).

PET Bale Grade	Grade A	Grade B	Grade C
Total PET fraction by weight	94% or above	83 – 93%	73 – 82%

"PET fraction" refers to the total weight of PET in a PET bale, inclusive of caps and labels when still attached to PET containers, as a percentage of the total weight of that bale.

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

- Any other Color PET Containers (including fluorescents and opaques)

ALLOWABLE CONTAMINANTS AT LOW LEVELS: Total contaminants should not exceed the percentages, by weight, as defined by PET bale grade chart above, with no more than 2% of any of those listed below. The lower the % of contaminatioin, the higher the value of the bale; higher levels of contamination is potential for downgrade or rejection. Excessive levels of any of the individual contaminants below may reduce bale value.

- HDPE (#2), LDPE (#4), PP (#5) rigid packaging
- Aluminum cans
- Loose paper or cardboard (OCC)
- Liquid residues

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

- PVC (#3) in any form
- Chemically incompatible or low temperature melting materials, including PS (#6), PETG, and PLA, plastics, as rigid or foam in any product

- Any #7 plastics, including polycarbonate bottles
- Any non-packaging products
- Any bulky rigid plastics
- Any plastic bags or plastic film
- Any plastic foam
- Any Item containing degradable additives
- Containers which held hazardous materials, such as flammable, corrosive or reactive products, pesticides or herbicides, including motor oil bottles
- Other metal, wood, glass
- Batteries
- Bio-medical waste items (e.g., syringes, sharps, gloves, masks)
- Rocks, stones, mud, oils and 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.

If a material is not specified above, seller should assume it is not acceptable to include in the bale.

Bale Size/Minimum Shipping Weight/ Tare Weight: Bales should be a minimum of 30"x42"x48". Bale sizes should allow a minimum of 35,000 pounds to be shipped on 53-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.

Bale Density: 15-18 lbs/ft^3

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, 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 binding materials other than 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 two (2) weeks to prevent UV degradation from direct sunlight and moisture contamination.

DOCUMENT VERSION HISTORY

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