



The Association of Postconsumer  
Plastic Recyclers

# National Mixed Rigid Plastic Bale Composition Study

Final Report  
July 2015



Prepared by Moore Recycling Associates Inc

**MOORE**  
RECYCLING ASSOCIATES INC.  
*Recycling Implementation Specialists*

Introduction	4
<b>With Appreciation</b>	<b>4</b>
<b>Purpose</b>	<b>4</b>
Bale Category Generation and Descriptions	5
Sort Methodology	6
<b>Definitions</b>	<b>7</b>
Product Categories	7
Resin	8
Findings: Mixed Rigid Plastic Bale Composition Analysis	9
<b>By Product Category</b>	<b>9</b>
<b>By Resin</b>	<b>11</b>
<b>General Issues and Observations</b>	<b>13</b>
Destination: Domestic vs Export	14
Data Viability and Accuracy	15
Color Sorts	16
<b>All Rigid Plastic</b>	<b>18</b>
<b>All Rigid Plastic: With Bulky</b>	<b>18</b>
All Rigid Plastic: With Bulky - By Resin	19
All Rigid Plastic: With Bulky - By Product Category	19
<b>All Rigid Plastic: No Bulky</b>	<b>21</b>
All Rigid Plastic: No Bulky - By Resin	22
All Rigid Plastic: No Bulky - By Product Category	22
<b>Pre-Picked Rigid Plastic</b>	<b>24</b>
<b>Pre-Picked Rigid Plastic: With Bulky</b>	<b>24</b>
Pre-Picked Rigid Plastic: With Bulky - By Resin	25
Pre-Picked Rigid Plastic: With Bulky - By Product Category	25
<b>Pre-Picked Rigid Plastic: With Bulky (2)</b>	<b>28</b>
Pre-Picked Rigid Plastic: With Bulky (2) - By Resin	29
Pre-Picked Rigid Plastic: With Bulky (2)- By Product Category	29
<b>Pre-Picked Rigid Plastic: No Bulky</b>	<b>31</b>
Pre-Picked Rigid Plastic: No Bulky - By Resin	32
Pre-Picked Rigid Plastic: No Bulky - By Product Category	32
<b>Tubs &amp; Lids</b>	<b>35</b>
Tubs and Lids - By Resin	36
Tubs and Lids - By Product Category	36
<b>Bulky Rigid Plastic</b>	<b>39</b>

Bulky Rigid Plastic - By Resin	40
Bulky Rigid Plastic - By Product Category	40
<b>HDPE Injection: Bulky</b>	<b>42</b>
HDPE Injection: Bulky - By Resin	43
HDPE Injection: Bulky - By Product Category	43
<b>HDPE Bottles &amp; Containers - Colored (formerly Colored HDPE Bottles with Olefin Containers)</b>	<b>45</b>
HDPE Bottles & Containers - By Resin Type	46
HDPE Bottles & Containers - By Product Category	46
<b>PP Bottles &amp; Containers</b>	<b>48</b>
PP Bottles & Containers - By Resin	49
PP Bottles & Containers - By Product Category	49
<b>Next Steps</b>	<b>51</b>
<b>Mixed Resin Bale Sorts</b>	<b>51</b>
<b>Appendices</b>	<b>52</b>

# Introduction

## With Appreciation

Moore Recycling would like to thank the following organizations for their support. First and foremost the **Association of Postconsumer Plastic Recyclers** (APR), for spearheading and funding this project. Also **BoReTech**, the **Plastic Foodservice Packaging Group** (PFBG), the **Plastic Shipping Container Institute** (PSCI), and **APR's Rigid Plastic Recycling Committee Members** for providing funding. We want to thank and acknowledge **Envision Plastics**, **KW Plastics**, **Entropex** and **Mings Recycling** for generously providing us bales, space, bins and significant support including forklift and sorting personnel. Thank you to **Waste Management** and **ReCommunity** for providing bales. Lastly, the following individuals generously gave their time to help make the sort successful: **My linda Jacobson** and **Julio Serrano** helped us sort. Thank you all, we could not have done it without you!

## Purpose

The purpose of this project is to determine the composition of the various types of mixed rigid plastic bales generated in North America. With this information, it will be possible to make a more accurate estimate of the types, volume and destination of recycled postconsumer rigid plastic.

A total of 23 bales were sorted in the fall of 2014 and early 2015. Bales were sorted at four facilities: two locations in California, Alabama and Canada. The facilities provided bales and Moore recycling supplemented as needed and able. We were somewhat constrained from sorting more samples due to the availability of bales. We were not able to source every type of bale: we could not find *Commingled Bottles*, nor *Tubs & Lids with Bulky*. And, in some cases, we were only able to source one sample. Due to available time and resources we sorted more *Pre-picked: No Bulky* than originally planned because they were so readily available and this is a high volume category reported, particularly in the past few years. We sorted the following bales.

6 - *Pre-Picked Rigid Plastic: No Bulky*

3 - *Bulky Rigid*

3 - *PP Bottles & Containers*

2 - *All Rigid Plastic: No Bulky*

2 - *HDPE Injection: Bulky*

2 - *HDPE Bottles & Containers*

2 - *Tubs & Lids*

1 - *Pre-picked Rigid Plastic: With Bulky V1*

1 - *Pre-picked Rigid Plastic: With Bulky V2*

1 - *All Rigid Plastic: With Bulky*

## **Bale Category Generation and Descriptions**

### *Pre-Picked Rigid Plastic: No Bulky*

From MRFs that pull PET and HDPE bottles and bale all remaining plastic bottles and containers together, but do not have—or separately bale—bulky rigid plastic. Bales contain: all non-bottle containers, non PET/HDPE bottles but no bulky rigid plastic.

### *Bulky Rigid*

From MRFs that pull large plastic items, usually at the front end. Bales contain: HDPE Bulky rigid plastic (includes buckets, totes, crates, lawn furniture, carts, storage bins)

### *PP Bottles & Containers (from Auto Sort)*

From MRFs that auto sort for PP. Bales contain: PP bottles, non-bottle containers and other non-containers—may also contain bulky rigid items.

### *All Rigid Plastic: No Bulky*

From MRFs that mix plastic bottles and containers together, but do not have—or separately bale—bulky rigid plastics. Bales contain: all bottles and non-bottle containers, but no bulky rigid plastic.

### *HDPE Injection: Bulky*

From MRFs that pull large plastic items, usually at the front end and segregate PE and bale together. Bales contain: HDPE Bulky rigid plastic (includes buckets, totes, crates, lawn furniture, carts, storage bins), may include some bulky PP and LDPE.

### *HDPE Bottles & Containers - Colored (from Auto Sort)*

From MRFs that auto sort for HDPE, and HDPE jars/containers end up with the colored HDPE bottles. Bales contain: Colored HDPE Bottles and jars/containers

### *Tubs & Lids*

From MRFs that pull PET and HDPE bottles, then pull and bale tub and lid containers. Bales contain: PP bottles (some PE), PP and PE household, non-bottle containers.

### *Pre-Picked Rigid Plastic: With Bulky* V1

From MRFs that pull PET and HDPE bottles and bale all remaining rigid plastics. Bales contain: all non-bottle containers, bulky rigid plastic, and non-PET/HDPE bottles.

### *Pre-Picked Rigid Plastic: With Bulky* V2

From a MRF that also pulled out tubs and lids and HDPE and PP bulky items, leaving mostly thermoforms and non-olefin containers and bulky items

### *All Rigid Plastic: With Bulky*

From MRFs that mix plastic bottles and containers together, but do not have—or separately bale—bulky rigid plastics. Bales contain: all bottles and non-bottle containers, but no bulky rigid plastic.

# Sort Methodology

Representative samples of each of the 10 bale types were sorted by resin and product type: a total of 400 to 1,500 pounds per bale category.

The first step was to photograph and weigh each bale we sorted. Once the bale was broken open we did an initial sort into thirteen (13) product categories.

Three (3) of the categories were weighed and recorded without further separation:

- Small plastic pieces<sup>1</sup>
- Plastic with metal
- Trash

Ten (10) of the categories were further sorted by resin:

- Bottles
- Containers
- Cups
- Cup and Container Lids
- Tubes
- Clamshells, Trays, Domes, Blister, Produce Containers<sup>2</sup>
- Nursery Pots
- Buckets/Lids
- Bulky items
- Other

Buckets were further sorted into: Square 2-4 gallon, round 2-4 gallon and 5 gallon and over.

The above products were sorted by the following resins, where present:

- PET
- HDPE
- HDPE Compatible
- PVC
- LDPE
- PP
- PP Compatible
- Mixed PE/PP
- PS
- PLA/Bio
- PC
- Other

---

<sup>1</sup> In the 2010/11, the procedure included a float sink test on the small plastic pieces. That step was not repeated in the 2014/15 study.

<sup>2</sup> This category is referred to as “thermoforms” in this report



We used a handheld resin ID unit as a spot check for items that were not easily identified by sight, feel or sound.

We sorted two product categories by color: HDPE bottles, and Cups. HDPE Bottles were sorted by Natural and Color. Cups were sorted by: Clear (Printed vs Minimal Print), White (Printed vs Minimal Print) and Colored. A date stamp or less printing was considered Minimal Print.

Once we completed the resin and color sorts we weighed each resin/product category and recorded the weight. We photographed samples of product categories. All percentages in this report are based on weight.

## Definitions

### Product Categories

Bottles - Narrow neck containers. The PET category includes threaded neck containers/jars, e.g., peanut butter jars.

Containers - All non-bottle containers. e.g. sour cream tub, yogurt container, Folgers coffee container, baby wipe container, storage containers. This category also include thermoformed small containers. HDPE and other containers with just a slightly narrower top were put in the container category.

Cups - all drinking cups

Lids - all container and drink cup lids

Clamshells, Trays, Domes, Blister, Produce Containers - meant to encompass thermoform packaging or flats. Includes clamshells, plates, blister pack, cake domes, cookie, trays, produce containers, etc. Also includes some sheet like packaging. This category does not include thermoformed tubs/small containers.

Nursery pots - All nursery pots, all sizes.

Buckets - all Buckets and their lids. Buckets were broken into three categories: square 2-4 gallon, round 2-4 gallon and 5 gallon and over.

Bulky Items - Any large, bulky items close to a 5 gallon bucket size and larger e.g., crates, large toys, chairs, laundry baskets, large storage containers, totes, large PVC pipe, etc.

Other - Anything that is not a bottle, container, cup, lid or thermoform that is not a large item e.g., hangers, small toys, unidentifiable pieces, drip tape, small PVC pipe, CD/DVDs, and electronic components

Plastic with Metal - Anything with a substantial amount of plastic with a significant amount of metal weight. Any items that were predominantly metal were put in Trash.

Trash - Anything that is not plastic. Any plastic that is not rigid (e.g., film) or that is foamed (e.g., EPS). Products where the non-plastic component (metal, food waste, other non-plastic) substantially outweighed the plastic component.

Small Plastic Pieces - Small unidentifiable plastic bits or small items, such as bottle caps, found at the end of the sort.

## **Resin**

PET - Polyethylene Terephthalate

HDPE - High Density Polyethylene

LDPE - Low Density Polyethylene, Linear Low Density Polyethylene and Ultra Low Density Polyethylene

PVC - Polyvinyl Chloride

PP - Polypropylene

PS - Polystyrene

PC - Polycarbonate

PLA - Poly Lactic Acid

Bio - Any non-PLA bio-based resin that is not represented above

HDPE or PP Compatible / Other - Products marked with both an HDPE #2 (or a PP #5) and an Other #7 usually indicating compatibility

Other - Any resin not identified above - ABS, PC etc. or products that were unidentifiable by sight or by the hand held resin identification unit

Please note: Any category under .1% was put under Other Resin in the resin pie chart in this report.



# Findings: Mixed Rigid Plastic Bale Composition Analysis

## By Product Category

The following table shows the composition of the ten (10) bale categories by Product Category. Note: **bold is 2% and greater**, **bold green is 10% and greater**

% of Total by Product Category	<i>All Rigid Plastic: With Bulky</i>	<i>All Rigid Plastic: No Bulky</i>	<i>Pre-Picked Rigid Plastic: With Bulky</i>	<i>Pre-Picked Rigid Plastic: With Bulky (2)</i>	<i>Pre-Picked Rigid Plastic: No Bulky</i>
Bottles	<b>37.8%</b>	<b>71.0%</b>	<b>4.7%</b>	0.2%	<b>18.2%</b>
Containers	1.2%	<b>5.4%</b>	<b>3.1%</b>	0.1%	<b>18.3%</b>
Lids	0.7%	<b>2.3%</b>	0.2%	0.1%	<b>8.2%</b>
Tubes	0.0%	0.1%	0.0%	0.0%	0.0%
Thermoforms <sup>4</sup>	1.0%	<b>6.0%</b>	<b>5.6%</b>	<b>16.8%</b>	<b>17.2%</b>
Cups	0.3%	0.9%	1.3%	0.0%	<b>6.2%</b>
Nursery Pots	0.0%	1.0%	<b>5.3%</b>	<b>2.7%</b>	1.5%
Buckets	<b>6.9%</b>	<b>3.9%</b>	<b>3.2%</b>	0.2%	1.2%
Bulky Items	<b>34.7%</b>	<b>3.9%</b>	<b>50.4%</b>	<b>29.6%</b>	0.4%
Plastic With Metal	<b>5.8%</b>	0.0%	<b>12.0%</b>	<b>18.2%</b>	1.5%
Other	1.5%	<b>2.4%</b>	0.5%	<b>14.9%</b>	<b>11.7%</b>
Small Plastic Pieces	<b>5.9%</b>	1.3%	<b>5.6%</b>	<b>4.0%</b>	<b>4.6%</b>
Total Rigid Plastic	<b>95.7%</b>	<b>98.1%</b>	<b>91.7%</b>	<b>86.9%</b>	<b>88.8%</b>
Total Trash	<b>4.3%</b>	<b>1.9%</b>	<b>8.3%</b>	<b>13.1%</b>	<b>11.2%</b>

<sup>3</sup> Thermoforms were defined as: Clamshells, Trays, Domes, Blister Pack and Produce Containers

<b>% of Total by Product Category</b>	<b><i>Tubs &amp; Lids</i></b>	<b><i>Bulky Rigid Plastic</i></b>	<b><i>HDPE Injection: Bulky</i></b>	<b><i>HDPE Bottles &amp; Containers</i></b>	<b><i>PP Bottles &amp; Containers</i></b>
<b>Bottles</b>	<b>27.7%</b>	<b>2.3%</b>	1.9%	<b>90.6%</b>	<b>24.5%</b>
<b>Containers</b>	<b>36.0%</b>	0.2%	0.1%	<b>5.3%</b>	<b>28.1%</b>
<b>Lids</b>	<b>8.1%</b>	0.0%	0.0%	0.8%	<b>12.4%</b>
<b>Tubes</b>	0.0%	0.0%	0.0%	0.1%	0.0%
<b>Thermoforms</b>	<b>3.0%</b>	1.0%	0.5%	0.3%	<b>6.0%</b>
<b>Cups</b>	<b>9.7%</b>	0.0%	0.0%	0.4%	<b>7.6%</b>
<b>Nursery Pots</b>	<b>2.9%</b>	<b>4.0%</b>	<b>3.3%</b>	0.0%	1.2%
<b>Buckets</b>	0.0%	<b>10.4%</b>	<b>48.2%</b>	0.2%	1.3%
<b>Bulky Items</b>	0.2%	<b>62.5%</b>	<b>40.8%</b>	0.0%	0.0%
<b>Plastic With Metal</b>	0.6%	<b>10.5%</b>	<b>2.2%</b>	0.1%	0.7%
<b>Other</b>	<b>3.4%</b>	0.1%	0.0%	1.1%	<b>6.7%</b>
<b>Small Plastic Pieces</b>	<b>3.1%</b>	0.7%	1.2%	0.2%	<b>4.4%</b>
<b>Total Rigid Plastic</b>	<b>94.6%</b>	<b>91.5%</b>	<b>98.2%</b>	<b>99.1%</b>	<b>92.7%</b>
<b>Total Trash</b>	<b>5.4%</b>	<b>8.5%</b>	<b>1.8%</b>	<b>0.9%</b>	<b>7.3%</b>

## By Resin

The following table shows the composition of the ten (10) bale categories by Resin.

<b>% of Total by Resin</b>	<b><i>All Rigid Plastic: With Bulky</i></b>	<b><i>All Rigid Plastic: No Bulky</i></b>	<b><i>Pre-Picked Rigid Plastic: With Bulky</i></b>	<b><i>Pre-Picked Rigid Plastic: With Bulky (2)</i></b>	<b><i>Pre-Picked Rigid Plastic: No Bulky</i></b>
<b>HDPE</b>	<b>54.4%</b>	<b>46.9%</b>	<b>32.7%</b>	<b>18.4%</b>	<b>7.7%</b>
<b>HDPE Compatible/ Other</b>	0.0%	0.0%	0.0%	0.0%	0.0%
<b>LDPE</b>	0.9%	0.7%	<b>3.6%</b>	0.0%	0.5%
<b>PP</b>	<b>5.0%</b>	<b>7.3%</b>	<b>23.1%</b>	<b>15.0%</b>	<b>43.6%</b>
<b>PP Compatible/ Other</b>	0.1%	0.2%	0.0%	0.0%	3.4%
<b>Mix PE/PP</b>	0.0%	0.0%	0.0%	0.0%	0.0%
<b>PET</b>	<b>18.8%</b>	<b>39.1%</b>	<b>6.1%</b>	<b>7.5%</b>	<b>17.9%</b>
<b>PS</b>	0.1%	0.7%	1.8%	<b>6.1%</b>	<b>3.7%</b>
<b>PVC</b>	0.0%	0.4%	<b>2.3%</b>	0.0%	<b>2.0%</b>
<b>PC</b>	0.0%	0.1%	0.0%	0.0%	0.0%
<b>PLA/Bio</b>	0.0%	0.1%	0.0%	0.0%	0.0%
<b>Other</b>	<b>4.7%</b>	1.5%	<b>4.6%</b>	<b>17.7%</b>	<b>3.9%</b>
<b>Plastic with Metal</b>	<b>5.8%</b>	0.0%	<b>12.0%</b>	<b>18.2%</b>	1.5%
<b>Small Plastic Pieces</b>	<b>5.9%</b>	1.3%	<b>5.6%</b>	<b>4.0%</b>	<b>4.6%</b>
<b>Total Rigid Plastic</b>	<b>95.7%</b>	<b>98.1%</b>	<b>91.7%</b>	<b>86.9%</b>	<b>88.8%</b>
<b>Total Trash</b>	<b>4.3%</b>	<b>1.9%</b>	<b>8.3%</b>	<b>13.1%</b>	<b>11.2%</b>

<b>% of Total by Resin</b>	<b><i>Tubs &amp; Lids</i></b>	<b><i>Bulky Rigid Plastic</i></b>	<b><i>HDPE Injection: Bulky</i></b>	<b><i>HDPE Bottles &amp; Containers</i></b>	<b><i>PP Bottles &amp; Containers</i></b>
<b>HDPE</b>	<b>2.8%</b>	<b>46.0%</b>	<b>69.0%</b>	<b>89.4%</b>	<b>5.5%</b>
<b>HDPE Compatible/ Other</b>	0.0%	0.0%	0.0%	1.7%	0.0%
<b>LDPE</b>	1.9%	1.6%	0.5%	0.1%	0.4%
<b>PP</b>	<b>65.9%</b>	<b>22.7%</b>	<b>19.8%</b>	<b>3.7%</b>	<b>62.8%</b>
<b>PP Compatible/ Other</b>	<b>4.2%</b>	0.0%	0.0%	0.0%	<b>7.2%</b>
<b>Mix PE/PP</b>	0.0%	0.0%	0.0%	0.0%	0.0%
<b>PET</b>	<b>13.2%</b>	0.7%	0.5%	<b>2.5%</b>	<b>8.9%</b>
<b>PS</b>	0.4%	0.8%	0.3%	0.1%	0.6%
<b>PVC</b>	0.5%	<b>2.8%</b>	0.9%	0.2%	0.2%
<b>PC</b>	0.0%	0.3%	0.0%	0.0%	0.0%
<b>PLA/Bio</b>	0.3%	0.0%	0.0%	0.0%	0.0%
<b>Other</b>	1.8%	<b>5.3%</b>	<b>3.8%</b>	1.2%	<b>2.2%</b>
<b>Plastic with Metal</b>	0.6%	<b>10.5%</b>	<b>2.2%</b>	0.1%	0.7%
<b>Small Plastic Pieces</b>	<b>3.1%</b>	0.7%	1.2%	0.2%	<b>4.4%</b>
<b>Total Rigid Plastic</b>	<b>94.6%</b>	<b>91.5%</b>	<b>98.2%</b>	<b>99.1%</b>	<b>92.7%</b>
<b>Total Trash</b>	<b>5.4%</b>	<b>8.5%</b>	<b>1.8%</b>	<b>0.9%</b>	<b>7.3%</b>

## General Issues and Observations

Overall, the bales contained less trash—an average of 6.3%—than found in the 2010/11 sort, which had a total average of 15.4% trash or an average of 7.9% without the two outliers (highly contaminated bales: one all rigid with film and one “residual” bale). Some bale categories, including All Rigid Plastic, had significantly less trash than in the first sort.

The data also shows a higher percentage of Plastic with Metal than in the previous sort, in all bales containing bulky plastic.

When obvious (by texture), we separated PP with a high percentage of calcium carbonate—pictured on right. In the *Pre-Picked-Rigid Plastic: No Bulky* bales we found up to two pounds per bale, representing 6% to 29% of the PP “Clamshells, Trays, Domes, Blister Pack and Produce Containers” category (aka thermoforms). The *PP Bottles & Containers* bales had smaller amounts:



0.1 to 0.5 pounds of this material representing 2% to 5% of the thermoform category.

We separated PP bottles with metal caps—predominantly Ensure Nutritional Shake bottles. There was a very consistent amount of these bottles in the bales that had a significant percentage of PP bottles: *Pre-Picked-Rigid Plastic: No Bulky*, *PP Bottles & Containers*, and *Tubs & Lids*. The average for these three bales was between 32% to 34% PP bottles with metal lids in the PP bottles.

Once again we note that when MRFs bale large items with small, the small items get stuck in the larger items and crushed together, for example buckets with bottles or containers inside of them. This illustrates one advantage of pulling the buckets and other bulky rigid plastic at the front end of the MRF. Also, APR may want to encourage communities to educate their residents to avoid stacking different types of things together—for example, clear and colored cups—as it decreases the ability of properly identifying and separating them later.

We found very little PLA; almost all of it was in the thermoform category. The highest overall percentage of PLA was found in a *Tubs and Lids* bale from CA: half a percent of the bale.

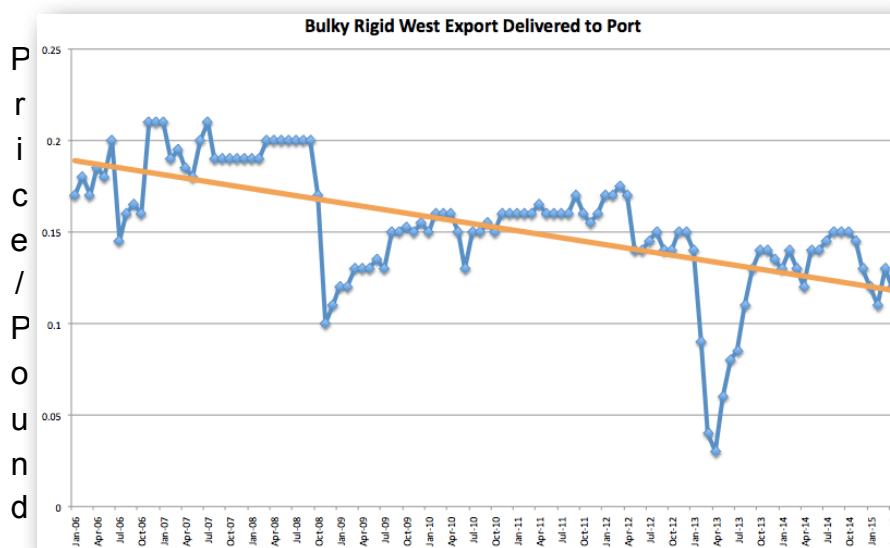
## Destination: Domestic vs Export

According to the data gathered for the *2013 National Postconsumer Non-Bottle Rigid Plastic Recycling Report* prepared by Moore Recycling for the American Chemistry Council, 54% of mixed rigid bales are sold to domestic buyers, the remaining material is purchased by the export market, primarily China. According to the survey, *Pre-Picked Rigid Plastic*<sup>4</sup> bales are the highest volume category of mixed rigid postconsumer plastic generated (61%), they also have the second lowest percentage of exports.

% Sold Domestic	2009	2013
<i>All Rigid Plastic</i> <sup>5</sup>	30%	61%
<i>Pre-Picked Plastic</i> <sup>5</sup>	38%	56%
<i>Tubs &amp; Lids</i>	26%	8%
<i>Bulky Rigid Plastic</i>	72%	42%

One noteworthy change, is the drop in domestic purchases of *Tubs & Lids* bales, this is a category that surged in popularity for a few years. During that period we saw the percent that stayed domestic also surge—from 26% in 2009, to 60% in 2011. As generation declined (generators moved to *Pre-Picked Rigid Plastic* or *All Rigid Plastic*), the percentage sold domestic also declined. Today these bales only represent 2% of all mixed rigid bales reported.

The other category with significant changes, is *Bulky Rigid Plastic*; in this case the content of the bales changed over time. In 2009, the bale was predominantly PE and PP, without much contamination and very little metal. As it became more common and demand increased, it evolved into



<sup>4</sup> With and without bulky

a more contaminated bale and—unlike other mixed plastic grades—dropped in value (as can be seen in the chart above). Domestic buyers reduced their purchase of the grade and switched to purchasing *HDPE Injection: Bulky* bales, which more closely resemble the early generation of *Bulky Rigid* bales.

## Data Viability and Accuracy

The following data shows what we found—resin and product categories—in each type of bale as a percentage of the total by weight. As we expected, there are some variances; yet we found consistency in each of the seven bale types for which we sorted more than one bale:

- *Pre-Picked Rigid Plastic: No Bulky*
- *Bulky Rigid Plastic*
- *HDPE Injection: Bulky*
- *PP Bottles & Containers*
- *HDPE with Containers*
- *Tubs & Lids*
- *All Rigid Plastic: No Bulky*

For example, in *Bulky Rigid Plastic* bales, even though the exact percentages varied, the majority of the resins found in the bale were consistently PP and PE and the highest percentage of product categories were always bulky items and buckets.

In looking at the high and low percentages found across the bales—at times there is quite a dramatic range—one could question the viability of the findings. But, because the data is expressed as a percentage of the bale by weight, this is to be expected. For example, we sorted six *Pre-Picked Rigid Plastic: No Bulky* bales, and—aside from the range in trash (2% - 31%)—the bales were very consistent. Yet the Bottle category ranged from 12% to 29% of the bale. The spread is generally due to variations in community outreach and MRF practices: the bales with the lowest percentage of Bottles also had a high percentage (20 - 21%) of “other resin”. Some MRFs sort for specific buyers; we found one *Pre-Picked Rigid Plastic: No Bulky* bale that had a high percentage of PET jars and learned that their PET bottle buyer did not want jars only bottles. That same bale and one other *Pre-Picked Rigid Plastic: No Bulky* also had a much higher percentage of thermoforms than the other 4 samples. This is likely due to the PET bottle buyers having a lower tolerance for PET thermoforms in the PET bottle bales, so more of the PET thermoforms end up in the *Pre-Picked Rigid Plastic* bales. This reinforces the impact of MRF practices on bale content and quality. Thus we are confident that following bale averages are generally representative of each bale type.

This is the second study of this type, and again we encountered some anomalies and have tried to point them out when we feel they’ve impacted results. We encourage APR to continue to study bale composition: to determine which spreads are due to anomalies in the data and to learn more about how the bale composition changes over time. We



hope to see more consistency over time, especially as APR Model Bale Specifications and standard terminology are more widely adopted.

## Color Sorts

As part of this sort, APR asked us to document color for some specific products: all HDPE bottles and PP, PS and PET cups were sorted by color. In addition, we performed some spot checks on PET and PP “thermoforms”.

### HDPE Bottles

The HDPE colored/natural bottle ratio, on average for all bales was, 66:34. This is a bit skewed from the *HDPE Bottles & Containers* bales that are predominantly colored (92%). The *Pre-Picked Plastic: No Bulky* bales came in at 60:40 colored to natural, yet there was a range of 37% to 88% colored HDPE bottles. Clearly, some MRFs are better at “prepicking” natural bottles! Below is some detail for specific bales as well as all bales combined.

HDPE Bottles	Average Percent	Pre-Picked Plastic: With Bulky	Pre-Picked Plastic: No Bulky	Tubs & Lids	All Bales
Natural	% of All Bottles	8	9	3	16
	% of Bale Sample	0.4	2	1	4
	% of HDPE Bottles	27	40	47	34
Colored	% of All Bottles	21	13	3	31
	% of Bale Sample	1	2	1	8
	% of HDPE Bottles	73	60	53	66

### Cups

PET cups were 9% of all cups found by weight. PET cups were most common in the California bales. They were found in *Tubs & Lids*, *Pre-Picked Plastic: No Bulky*, *HDPE Bottles & Containers*, and *All Rigid Plastic: No Bulky* bales. Of the PET cups by weight, 77% were clear with print, 22% were clear no print and 1% were colored.

PS cups were 8% of all cups found by weight. They occurred in *Pre-Picked Plastic: No Bulky*, *Pre-Picked Plastic: With Bulky*, and *PP Bottles & Containers*. Most bales contained more colored cups than clear: Of the PS cups by weight, 17% were clear with no print, 6 % were clear with print, and 77% were colored.

PP cups were 81% of all cups found by weight and made up 3% (over 200 pounds) of all the sample bales by weight. Of the PP cups by weight, 59% were clear with print, 4% were clear without print, 35% were white with print, and 2% were colored.

### PET Thermoforms

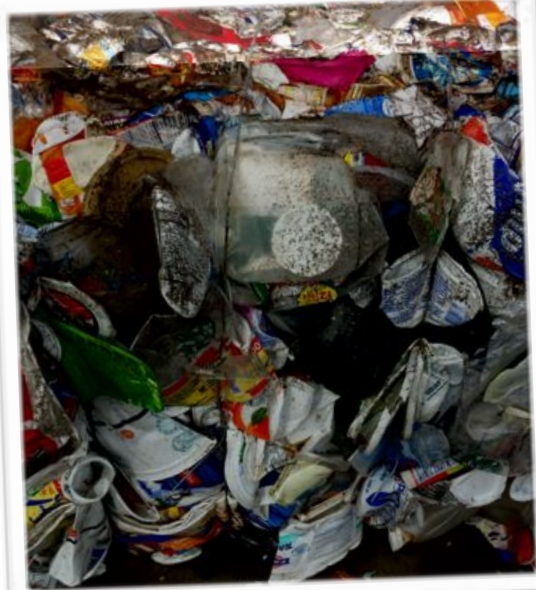
We spot checked the color of PET Thermoforms from four bales. Surprisingly, they were split into two sets: by weight, the two California bales had a much higher percentage of colored PET and the two bales from the Northeast had a much higher percentage of clear, again illustrating the impact specific MRF sorts may have on content. On average, they were 57% clear (with a spread from 24% to 91%), 38% black (with a spread from 9% to 71%) and 6% colored: including white (with a spread from 0% to 14%).

### PP Thermoforms

We spot checked the color of PP Thermoforms from three bales. Again, there was not much consistency. On average, they were 53% clear (with a spread from 29% to 74%), 34% black (with a spread from 19% to 43%) and 13% colored: including white (with a spread from 3% to 29%).

## All Rigid Plastic

*All Rigid Plastic* bales are found in MRFs that combine all plastic into a single bale: usually a smaller MRF. Some of these bales contain bulky plastics, some do not. We sorted three *All Rigid* bales, all were from the western U.S.

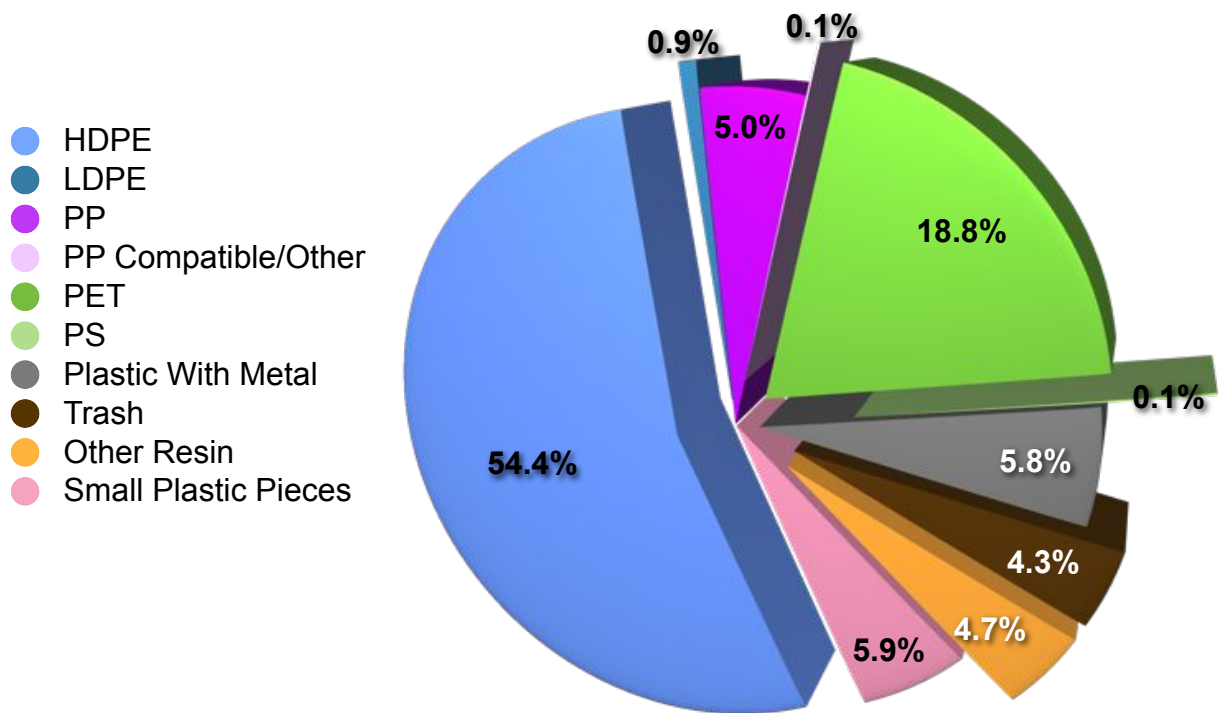


## All Rigid Plastic: With Bulky

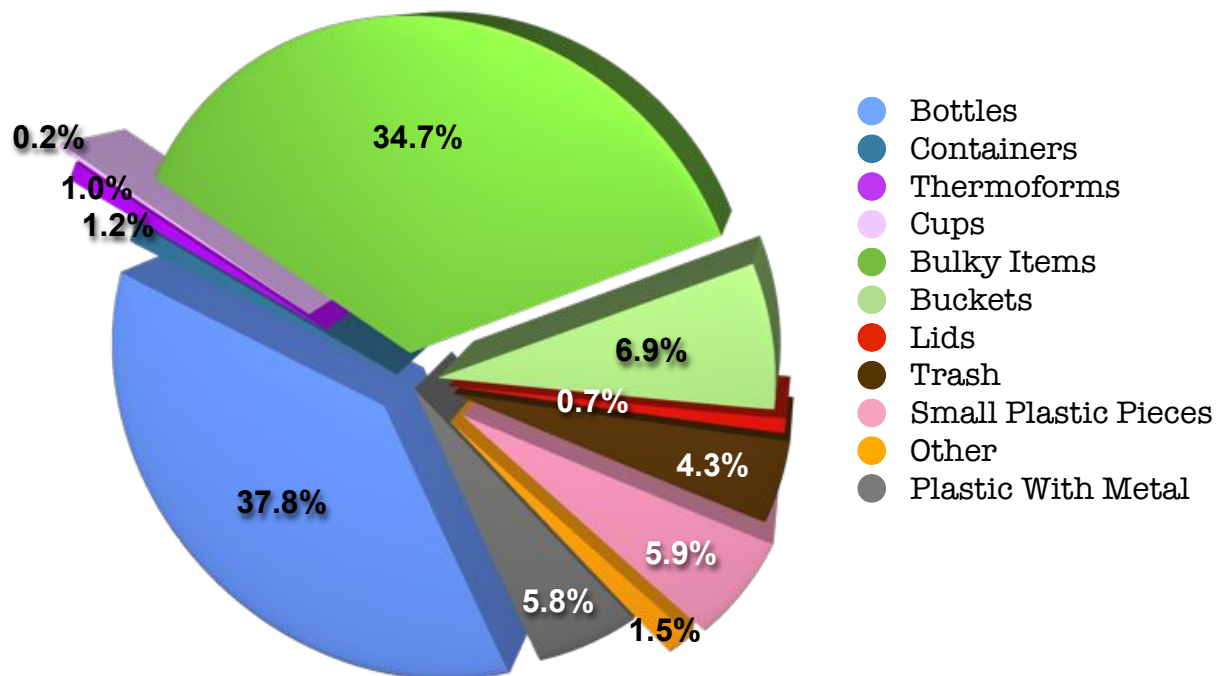


We sorted one *All Rigid Plastic: With Bulky* bale from an unknown Western U.S. location. It had a high percentage of Bulky Items (42% with buckets) and Bottles (38%) and a fairly low amount of trash (4%). The percentage of HDPE bottles was notably higher in the 2014 sort compared to the previous sort.

### All Rigid Plastic: With Bulky - By Resin



### All Rigid Plastic: With Bulky - By Product Category



## Major Categories that make up the *All Rigid Plastic Bale: With Bulky*

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *All Rigid Plastic: With Bulky* bales sorted in either study are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

*All Rigid Plastic: With Bulky*  
Resin & Product Category - Average % of Bales Sorted

<b><i>All Rigid Plastic: With Bulky</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
HDPE Bulky Items	26.8%	26.7%
HDPE Mixed Color & Natural Bottles	20.7%	7.7%
PET Bottle	16.3%	15.7%
HDPE Buckets	6.6%	1.3%
Small Plastic Pieces	5.9%	4.8%
Plastic With Metal	5.8%	0%
Other Bulky	4.4%	0%
PP Bulky	2.8%	1.8%
PET Other	1.5%	0%
PET Clamshells, trays, domes etc...	0.9%	1.7%
LDPE Bulky	0.8%	1.3%
PP Containers	0.6%	4%
PP Bottles	0.6%	0.8%
PP Lids	0.6%	0%
PP Other	0%	6.4%
HDPE Nursery Pots	0%	2.7%
PE Other	0%	2.3%
PP Nursery Pots	0%	1.3%
PS Clamshells, trays, domes etc...	0%	0.7%
Other - Other	0%	1.6%
<b>Total Rigid Plastic</b>	<b>95.7%</b>	<b>87.2%</b>
<b>Trash</b>	<b>4.3%</b>	<b>12.8%</b>



## ***All Rigid Plastic: No Bulky***

*All Rigid Plastic: No Bulky* bales are usually generated by small MRFs. All plastic is combined together and they do not accept—or separately bale—bulky rigid plastics. Bales contain: all bottles and containers, but no bulky rigid plastic.

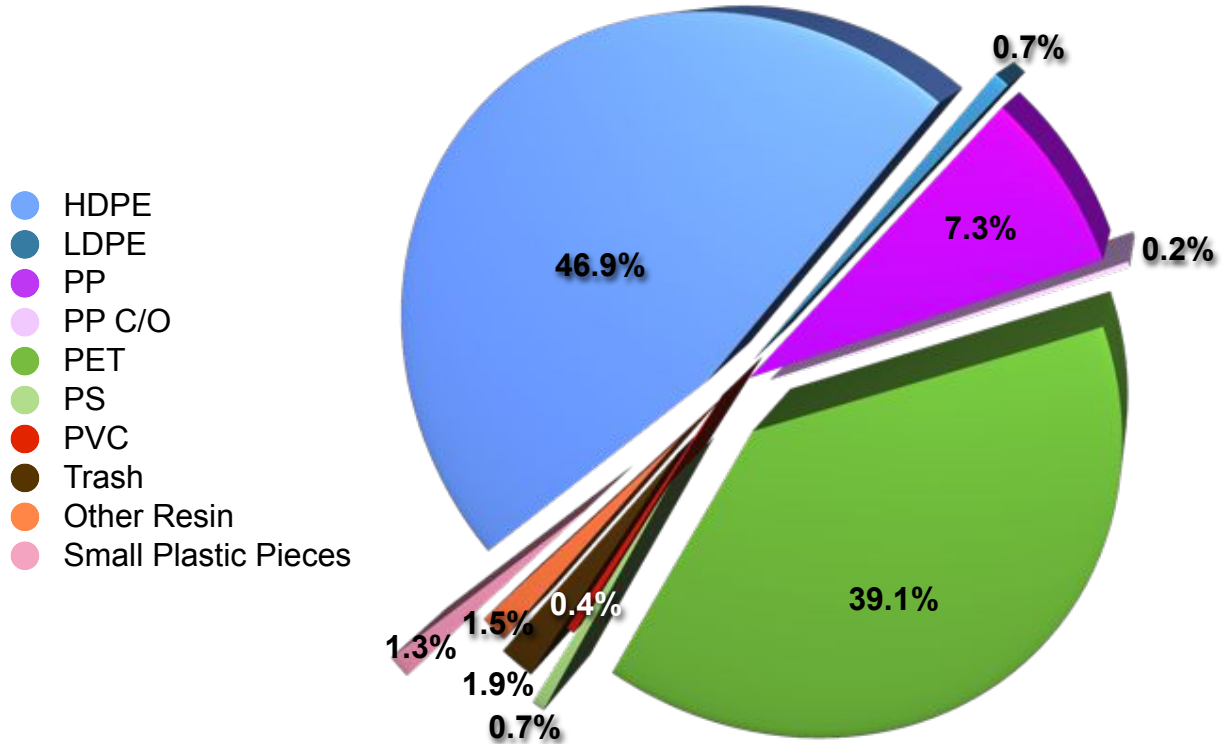


We sorted two *All Rigid Plastic: No Bulky* bales—one from Idaho and one from Utah. Very little trash was present in these bales: only 1.3%. As in the previous sort, bottles made up the majority of the bales at 71%. Thermoforms and Containers made up another 11%. The bale with the lowest percentage of Bottles had 10% larger items—Bulky items and Buckets—and, while still very low, it had the highest percentage of trash.

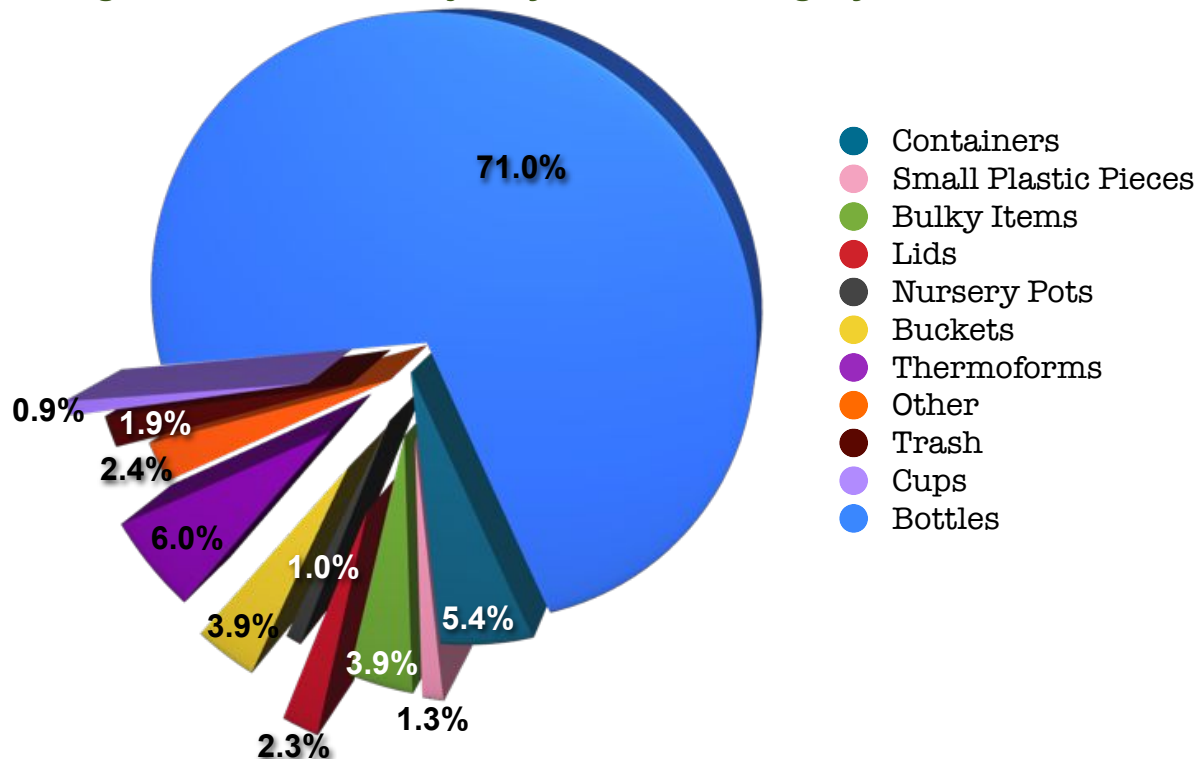
The largest product category for this bale is Bottles (LDPE bottles are shown at right), thus HDPE and PET made up 86% of the Bale with HDPE having a slightly larger portion. HDPE Bottles in these two bales had a 44% Colored - 56% Natural spread on average.



### All Rigid Plastic: No Bulky - By Resin



### All Rigid Plastic: No Bulky - By Product Category





## Major Categories that make up the *All Rigid Plastic: No Bulky Bale*

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *All Rigid Plastic: No Bulky* bales sorted in either study are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B

All Rigid Plastic: No Bulky  
Resin & Product Category - Average % of Bales Sorted

<b><i>All Rigid Plastic: No Bulky</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
PET Bottle	33.6%	50.9%
HDPE Natural Bottles	19.8%	12.2%
HDPE Colored Bottles	15.8%	10.0%
PET Clamshells, trays, domes etc...	5.0%	2.3%
HDPE Buckets	3.9%	0.0%
HDPE Bulky Items	3.3%	0.0%
PP Containers	3.2%	1.6%
HDPE Containers	2.0%	1.2%
Small Plastic Pieces	1.3%	1.3%
PP Lids	1.1%	0.0%
PE Other	0.9%	0.3%
PP Bottles	0.9%	0.0%
Other - Other	0.8%	0.0%
HDPE Nursery Pots	0.7%	0.0%
LDPE Lids	0.6%	0.0%
PP Clamshells, trays, domes etc...	0.6%	0.0%
Other Bottles	0.6%	0.0%
PP Bulky Items	0.5%	0.6%
HDPE Lids	0.5%	0.0%
PP Other	0.3%	0.7%
<b>Total Rigid Plastic</b>	<b>98.1%</b>	<b>88.1%</b>
<b>Trash</b>	<b>1.9%</b>	<b>11.9%</b>



## ***Pre-Picked Rigid Plastic***

*Pre-Picked Rigid Plastic* bales are the most common type of mixed rigid plastic bales. They are generated from MRFs that pull PET and HDPE bottles and bale all remaining rigid plastics together. We sorted 7 Pre-Picked Rigid Plastic Bales

## ***Pre-Picked Rigid Plastic: With Bulky***

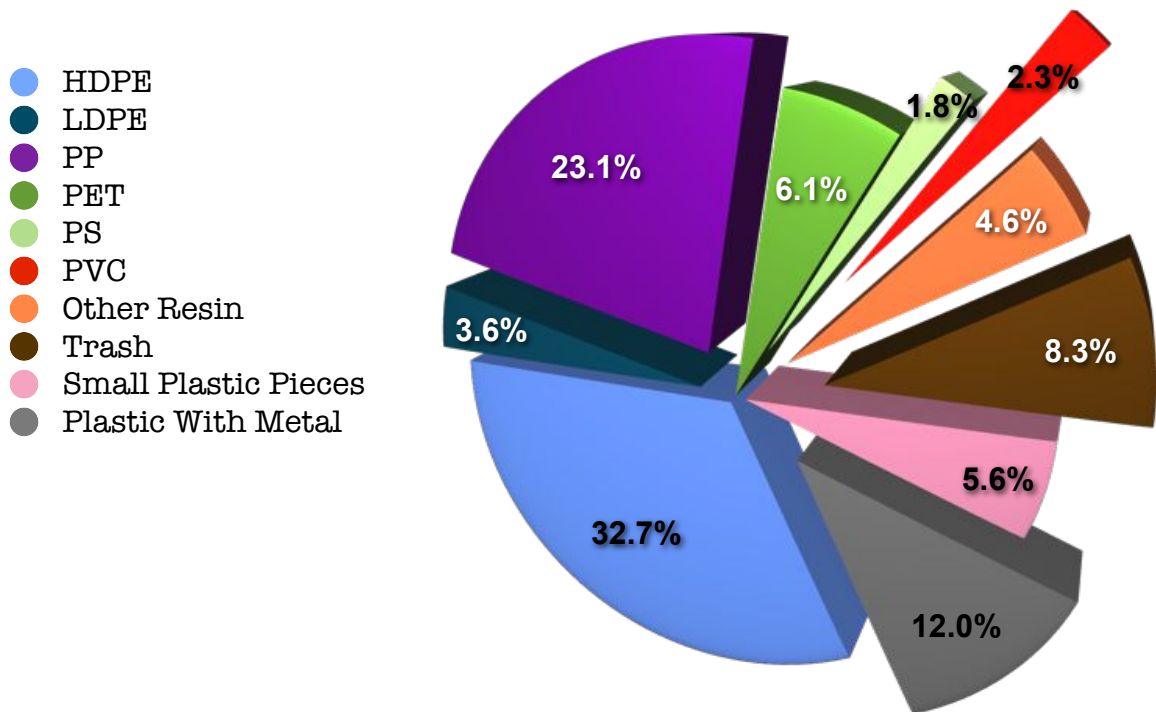
*Pre-Picked Rigid Plastic: With Bulky* bales are from MRFs that pull PET and HDPE bottles and bale all remaining rigid plastics. Bales contain: all non-bottle containers, bulky rigid plastic, and very few bottles.

We sorted one *Pre-Picked Rigid Plastic: With Bulky* bale from rural Northern, CA. These bales contain a high percentage of bulky items. Due to the high percentage of Bulky Items in these bales, the primary resins were PE, and PP.

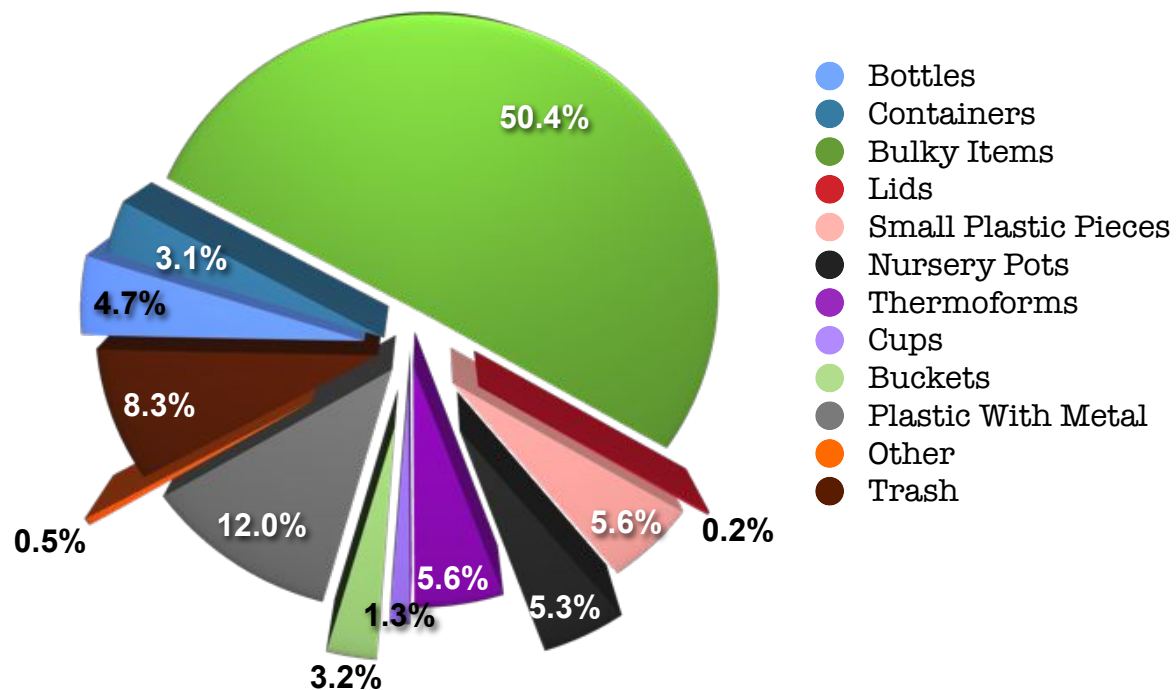


Consistent with other bales, the percentage of trash was lower compared to the 2011 sort, there was a higher percentage of PP and—as with all bales that contained bulky—there was significantly more plastic with metal. Otherwise, it was comparable with the previous sort.

### Pre-Picked Rigid Plastic: With Bulky - By Resin



### Pre-Picked Rigid Plastic: With Bulky - By Product Category



## Major Categories that make up the *Pre-Picked Rigid Plastic: With Bulky bale*

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *Pre-Picked Rigid Plastic: With Bulky* bales sorted in either study are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B

*Pre-Picked Rigid Plastic: With Bulky*  
Resin & Product Category - Average % of Bales Sorted

<b><i>Pre-Picked Rigid Plastic: With Bulky</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
HDPE Bulky Items	23.2%	16.4%
PP Bulky Items	18.3%	5.8%
Plastic With Metal	12.0%	1.9%
Small Plastic Pieces	5.6%	6.7%
HDPE Nursery Pots	5.1%	0.0%
Other Bulky Items	4.3%	1.8%
PET Clamshells, trays, domes etc...	4.0%	2.8%
LDPE Bulky Items	2.5%	0.7%
PET Bottle	2.0%	1.2%
PVC Bulky Items	2.0%	1.3%
HDPE Buckets	1.9%	7.7%
HDPE Mixed Natural & Colored Bottles	1.4%	4.2%
PP Containers	1.7%	3.5%
HDPE Containers	1.2%	3.7%
PP Buckets	1.4%	1.5%
LDPE Bottles	1.1%	0.0%
PP Clamshells, trays, domes etc...	1.0%	0.0%
PS Cups - Colored	0.8%	0.0%

<b><i>Pre-Picked Rigid Plastic: With Bulky</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
PS Other	0.5%	0.0%
PVC Clamshells, trays, domes etc...	0.2%	0.5%
PP Bottles	0.1%	1.2%
PE Other	0.0%	3.0%
PP Other	0.0%	4.8%
PC Bottles	0.0%	0.5%
PVC Other	0.0%	1.2%
Other - Other	0.0%	3.6%
<b>Total Rigid Plastic</b>	<b>91.7%</b>	<b>77.6%</b>
<b>Trash</b>	<b>8.3%</b>	<b>22.4%</b>



## ***Pre-Picked Rigid Plastic: With Bulky (2)***

This version of a *Pre-Picked Rigid Plastic: With Bulky* is from MRFs that also pulled out tubs and lids and HDPE and PP bulky items, leaving mostly thermoforms and non-olefin containers and bulky items. This is a low value, residual bale that may need another designation to distinguish it from higher value *Pre-Picked Rigid Plastic: With Bulky* bales.

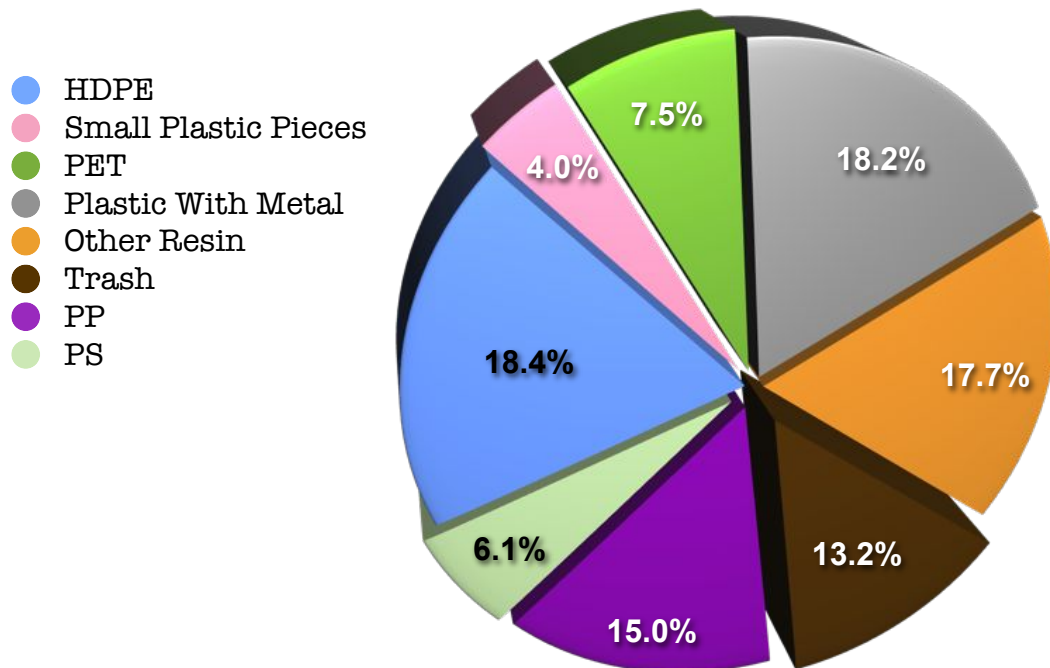


We sorted one *Pre-Picked Rigid Plastic: With Bulky (2)* bale from California. It contained a higher percentage of Trash than any other average bale category (and more than all but two bales sorted), and the highest average percentage of Plastic With Metal (one *Bulky Rigid Plastic* bale had a slightly higher percentage of plastic with metal). Plastic

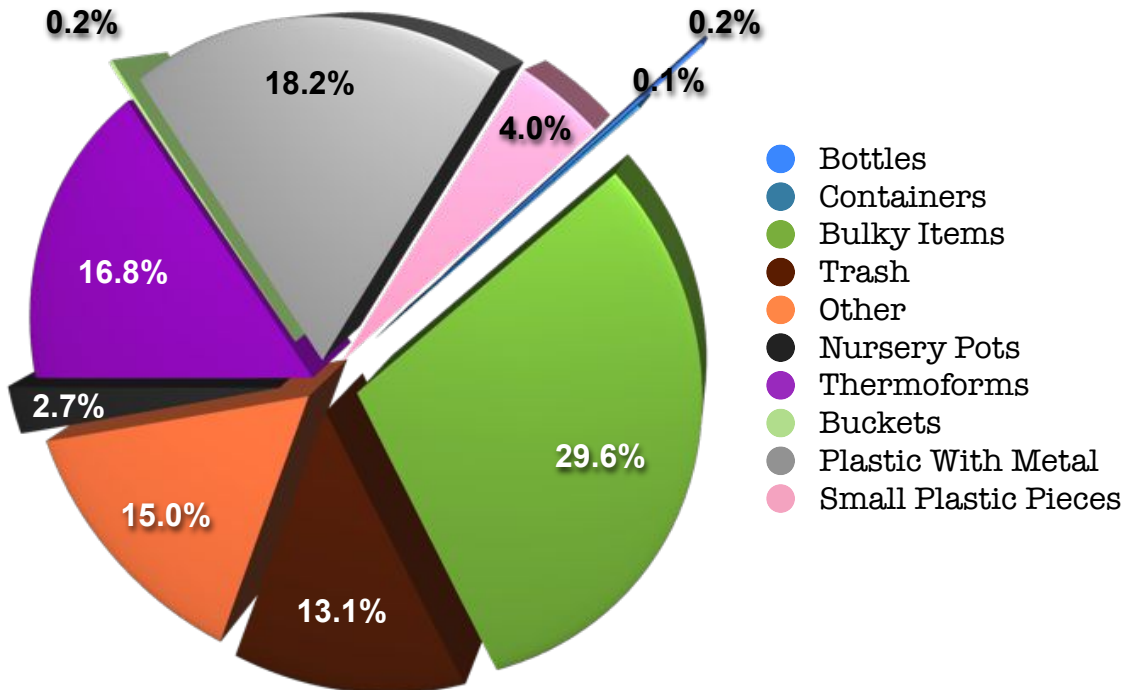
with metal and trash can be seen in the photos below.



### ***Pre-Picked Rigid Plastic: With Bulky (2) - By Resin***



### ***Pre-Picked Rigid Plastic: With Bulky (2)- By Product Category***





## Major Categories that make up the *Pre-Picked Rigid Plastic: With Bulky (2)* bale

The following table shows all resin and product categories making up .5% percent or more of the *Pre-Picked Rigid Plastic: With Bulky (2)* bale. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

### *Pre-Picked Rigid Plastic: With Bulky (2)* Resin & Product Category - % of Bale Sorted

<b>Pre-Picked Rigid Plastic: With Bulky (2)</b>	<b>2014 / 2015</b>
Plastic with Metal	18.2%
HDPE Bulky Items	17.3%
Other Bulky	12.3%
PP Other	10.2%
PET Clamshells, trays, domes, blister packs, produce containers	7.3%
PS Clamshells, trays, domes, blister packs, produce containers	6.1%
Other - Other	4.6%
Small Plastic Pieces	4.0%
PP Clamshells, trays, domes, blister packs, produce containers	2.6%
PP Nursery Pots	2.1%
Other Clamshells, trays, domes, blister packs, produce containers	0.8%
HDPE Nursery Pots	0.6%
HDPE Buckets	0.2%
<b>Total Rigid Plastic</b>	<b>86.9%</b>
<b>Trash</b>	<b>13.1%</b>

## ***Pre-Picked Rigid Plastic: No Bulky***

*Pre-Picked Rigid Plastic: No Bulky* bales are from MRFs that pull PET and HDPE bottles and bale all remaining plastic bottles and containers together, but do not have—or separately bale—bulky rigid plastic. Bales contain: all plastic containers, very few bottles and no bulky rigid plastic.



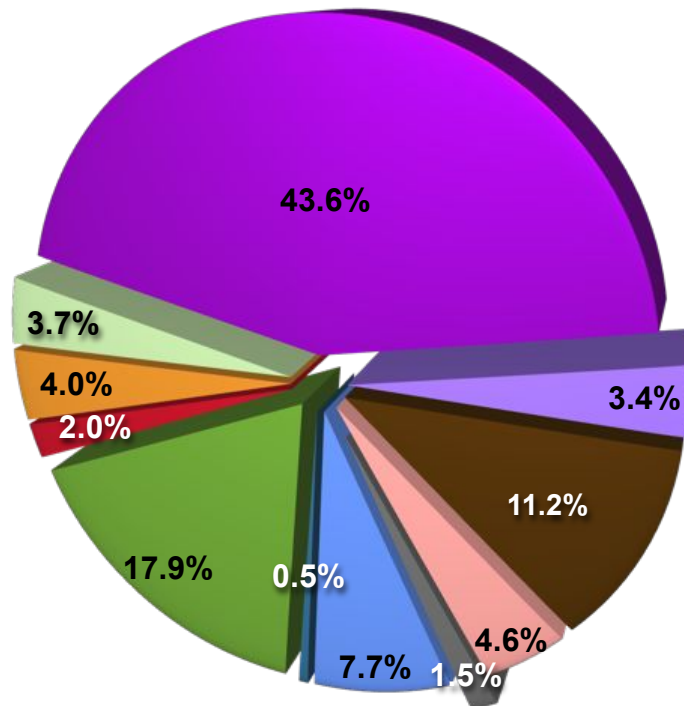
Six *Pre-Picked Rigid Plastic: No Bulky* bales were sorted, three from the Western U.S. (two CA), one from the MidWest, one from the South and one from Canada. A high percentage of Bottles, Containers and Thermoforms were found in these bales (PP containers can be seen in the photo below). The percentage range of key items was quite wide. For example, thermoform percentage ranged from five

percent up to 42 percent. The Trash content had an average of 11 percent yet it ranged from less than two percent to a high of over 30 percent (the bale with the highest trash content—by more than double—of any of the bales sorted). Without this out-layer, the average Trash content was less than 6%. This illustrates the complexity of this—and some other—mixed resin bale categories; the variability makes it difficult to plan for, which has a tendency to drive down their value. More consistency and clear definitions will increase the value of these bales.

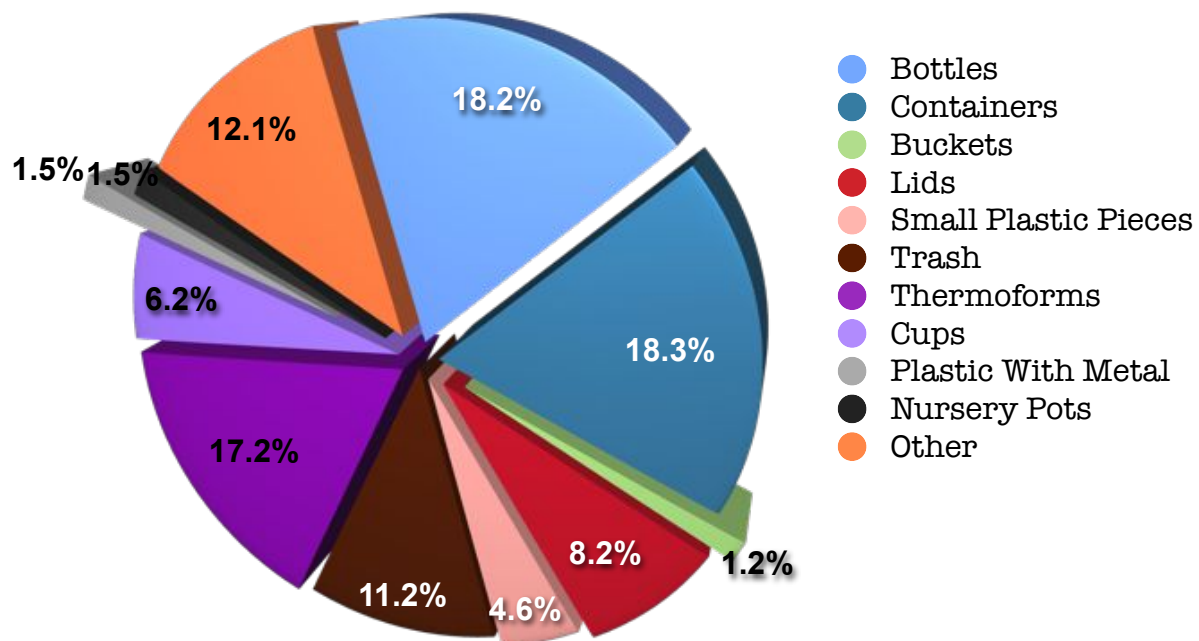


### Pre-Picked Rigid Plastic: No Bulky - By Resin

- HDPE
- LDPE
- PET
- PVC
- Other Resin
- PS
- PP
- PP Compatible/Other
- Trash
- Small Plastic Pieces
- Plastic With Metal



### Pre-Picked Rigid Plastic: No Bulky - By Product Category



## Major Categories that make up the *Pre-Picked Rigid Plastic: No Bulky* Bale

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *Pre-Picked Rigid Plastic: No Bulky* bales sorted in either year are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

*Pre-Picked Rigid Plastic: No Bulky*  
Resin & Product Category - Average % of Bales Sorted

<b><i>Pre-Picked Rigid Plastic: No Bulky</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
PP Containers	15.5%	18.7%
PET Clamshells, trays, domes etc...	11.3%	23.2%
PP Other	7.6%	0.0%
PP Lids	6.7%	0.0%
PET Bottles	5.7%	4.0%
Small Plastic Pieces	4.6%	6.9%
HDPE Mixed Natural & Colored Bottles	4.0%	3.2%
PP Clamshells, trays, domes etc...	3.4%	3.0%
PP Compatible/Other Bottles	3.4%	1.6%
PP Cups - Clear	3.5%	0.8%
PP Bottles	3.3%	8.9%
Other - Other	2.0%	0.0%
Plastic with Metal	1.5%	0.0%
PP Cups - Color	1.4%	0.6%
PVC Clamshells, trays, domes etc...	1.3%	2.0%
HDPE Containers	1.2%	3.1%
Other Bottles	1.2%	3.4%
PP Nursery Pots	1.1%	3.4%

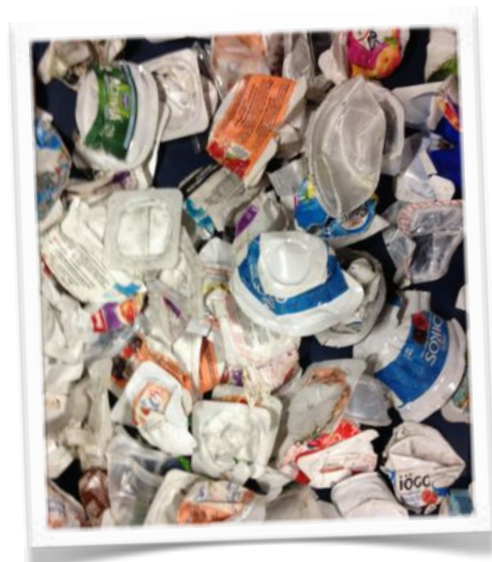
<b><i>Pre-Picked Rigid Plastic: No Bulky</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
PS Clamshells, trays, domes etc...	1.1%	1.2%
PS Other	1.0%	0.0%
HDPE Other	0.9%	0.0%
PS Cups	0.8%	1.5%
HDPE Buckets	0.6%	0.9%
HDPE Lids	0.6%	0.0%
PET Containers	0.6%	0.0%
PP Buckets	0.6%	0.0%
PS Containers	0.5%	0.0%
PVC Bottles	0.5%	1.2%
LDPE Lids	0.3%	0.8%
PET Cups	0.3%	1.0%
<b>Total Rigid Plastic</b>	<b>88.8%</b>	<b>95.5%</b>
<b>Trash</b>	<b>11.2%</b>	<b>4.5%</b>



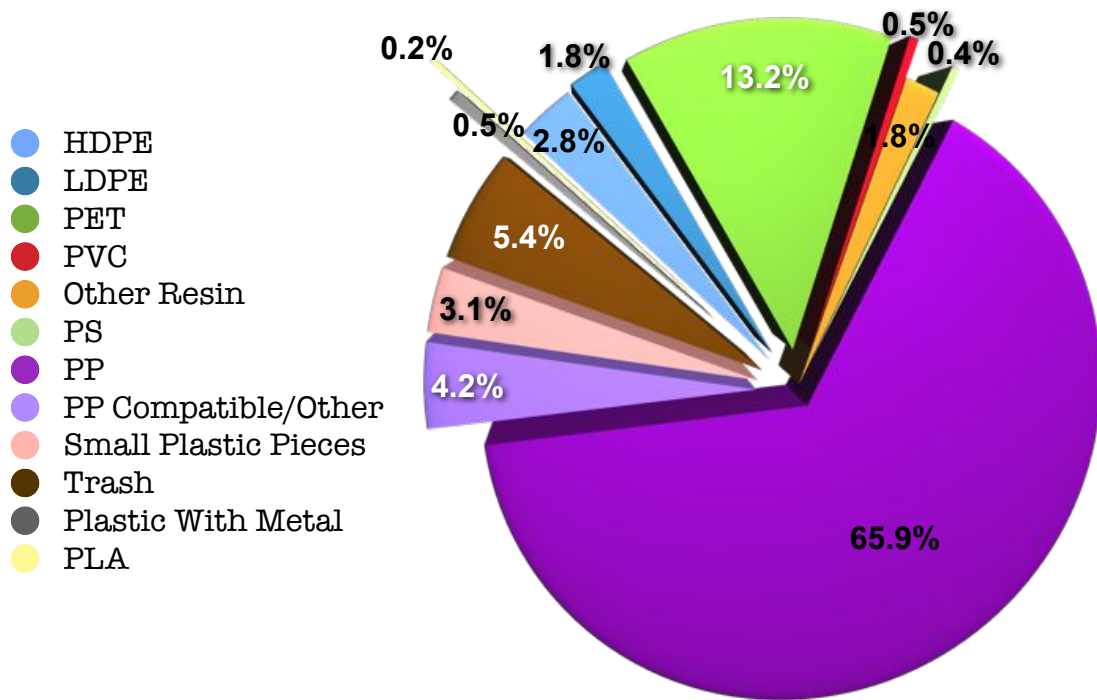
## ***Tubs & Lids***

*Tubs & Lids* bales are from MRFs that service *Tubs & Lids* programs or that specifically generate a *Tubs & Lids* bale through a positive sort. Bales contain: PP, PE household, non-bottle containers including buckets.

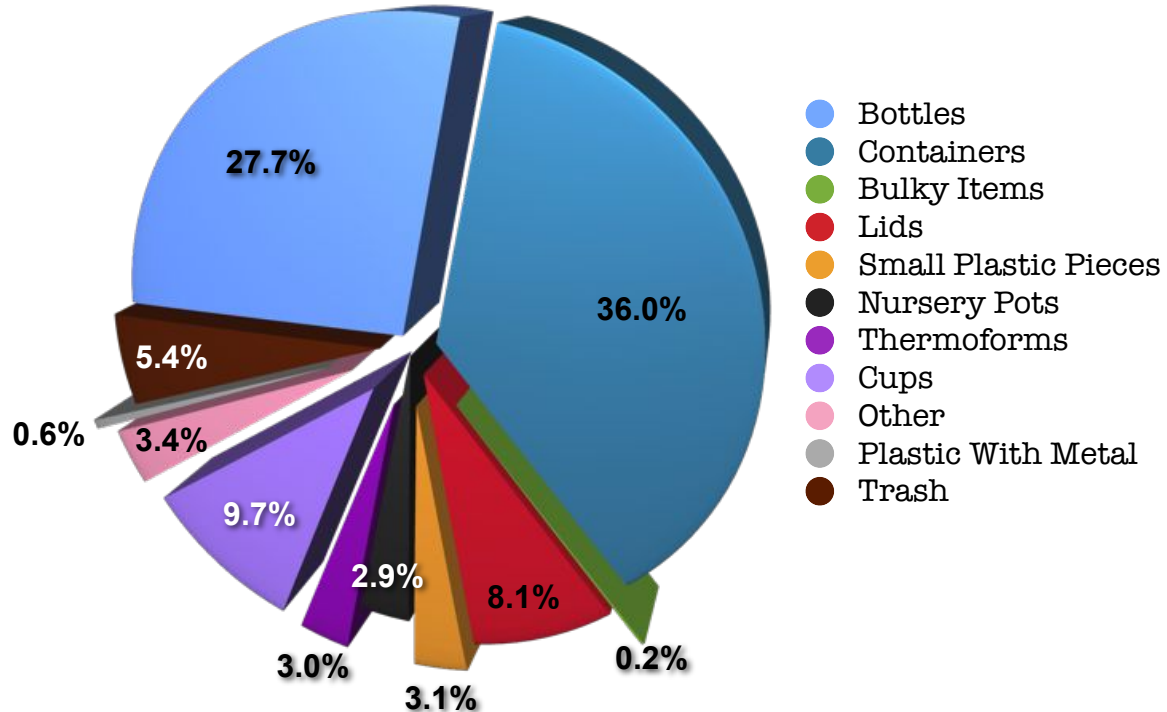
Two *Tubs & Lids* bales were sorted from, one from CA (1% trash) and one from the Northeast (11% trash). Containers and Bottles made up over 64% of these bales (an unsorted *Tubs & Lids* bale and PS containers can be seen in the photos below). By resin, PP made up the largest percentage of the bale at 67% while HDPE was only 3%. This is quite different from the 2010/11 sort where HDPE and PP were almost equal percentages.



### Tubs and Lids - By Resin



### Tubs and Lids - By Product Category





## Major Categories that make up the *Tubs & Lids* Bale

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *Tubs & Lids* bales sorted in either study are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

*Tubs and Lids*  
Resin & Product Category - Average % of Bales Sorted

<b><i>Tubs and Lids</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
PP Containers	34.7%	30.2%
PP Bottles	11.7%	1.4%
PET Bottles	9.0%	1.0%
PP Lids	6.3%	0.0%
PP Compatible/Other Bottles	4.2%	0.0%
PP Cups - Clear	3.8%	0.0%
PP Cups - Color	3.2%	0.0%
Small Plastic Pieces	3.1%	2.6%
PP Nursery Pots	2.7%	0.0%
PP Other	2.5%	0.0%
PET Cups	2.2%	0.0%
PET Clamshells, trays, domes etc...	1.8%	0.0%
LDPE Lids	1.4%	0.0%
PP Clamshells, trays, domes etc...	0.9%	0.0%
HDPE Colored Bottles	0.8%	1.1%
Other - Other	0.8%	0.0%
HDPE Natural Bottles	0.7%	1.3%
HDPE Containers	0.7%	17.4%
Other Bottles	0.6%	0.0%

<b><i>Tubs and Lids</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
LDPE Bottles	0.5%	0.0%
Plastic with Metal	0.5%	0.0%
HDPE Buckets	0.0%	24.4%
PP Buckets	0.0%	8.1%
<b>Total Rigid Plastic</b>	<b>94.6%</b>	<b>93.3%</b>
<b>Trash</b>	<b>5.4%</b>	<b>6.7%</b>

## ***Bulky Rigid Plastic***

*Bulky Rigid Plastic* bales are from MRFs that pull large plastic items, usually at the front end. Bales contain: all large items predominantly PE and PP.

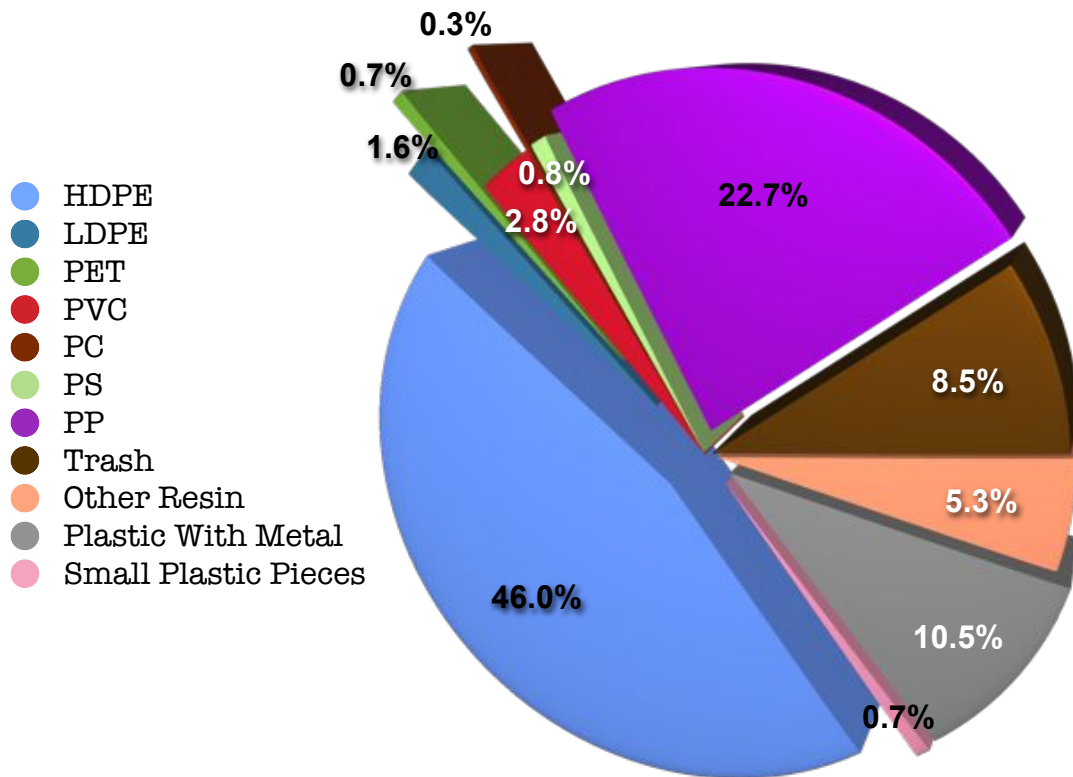
Three *Bulky Rigid Plastic* Bales were sorted, one from the West Coast, and two from



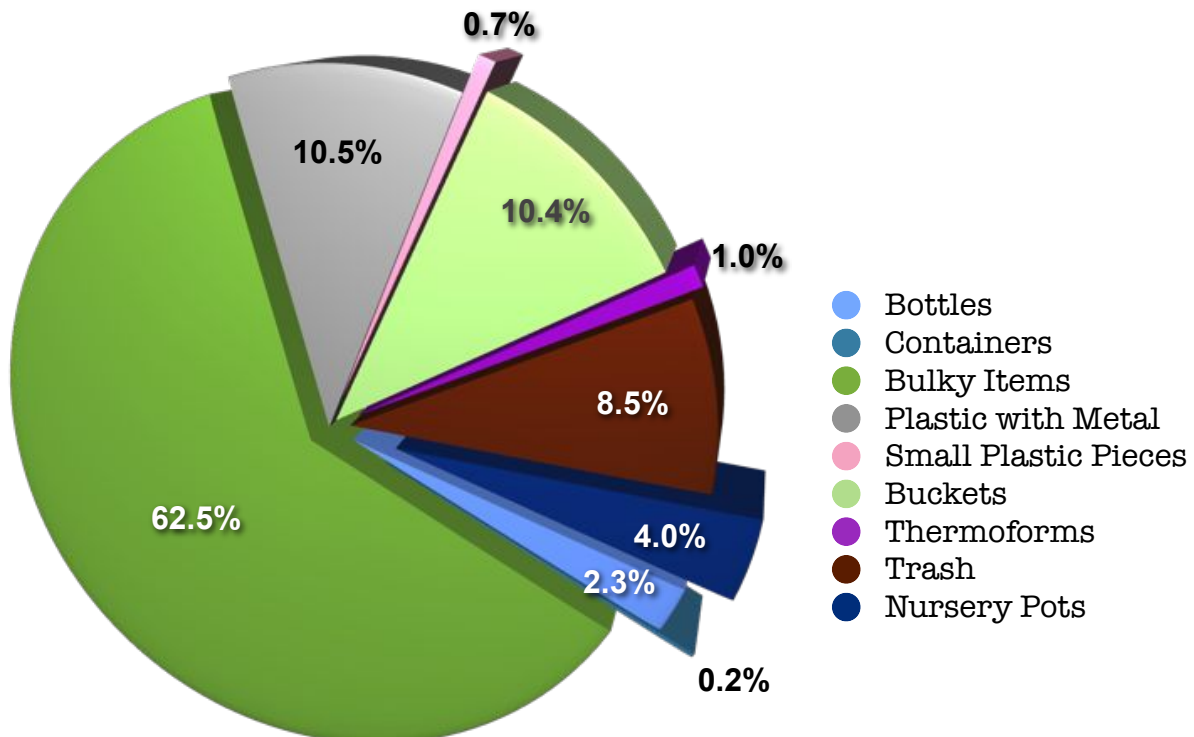
Eastern U.S. As expected, all had a large percentage of Buckets and Bulky items. These bales are very similar to the bales sorted in 2010/11; highest volume resin percentage is PE making up 48% combined (compared to 52% in 2010/11) with PP at 23%, the same as 2010/11. The most significant change over time is the increased amount of “plastic with metal” which jumped from an average of 1% up to 10%.



### Bulky Rigid Plastic - By Resin



### Bulky Rigid Plastic - By Product Category



## Major Categories that make up the *Bulky Rigid Plastic* Bale

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *Bulky Rigid* bales sorted in either study are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B..

*Bulky Rigid Plastic*  
Resin & Product Category -Average % of Bales Sorted

<b><i>Bulky Rigid Plastic</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
HDPE Bulky Items	34.9%	30.7%
PP Bulky Items	17.4%	16.9%
Plastic With Metal	10.5%	0.9%
HDPE Buckets	7.0%	13.9%
Other Bulky items	5.3%	3.5%
PP Buckets	3.4%	4.3%
PVC Bulky	2.6%	1.6%
HDPE Nursery Pots	2.1%	0.0%
HDPE Bottles	1.8%	0.6%
PP Nursery Pots	1.8%	0.0%
LDPE Bulky Items	1.6%	2.7%
Small Plastic Pieces	0.7%	3.2%
PET Clamshells, trays, domes etc...	0.5%	0.4%
PS Bulky Items	0.5%	0.7%
PS Clamshells, trays, domes etc...	0.3%	0.8%
PET Bottles	0.1%	0.5%
HDPE Containers	0.1%	1.1%
PE Other	0.0%	2.8%
PP Other	0.0%	1.2%
Other-Other	0.0%	2.1%
<b>Total Rigid Plastic</b>	<b>91.5%</b>	<b>90.0%</b>
<b>Trash</b>	<b>8.5%</b>	<b>10.0%</b>

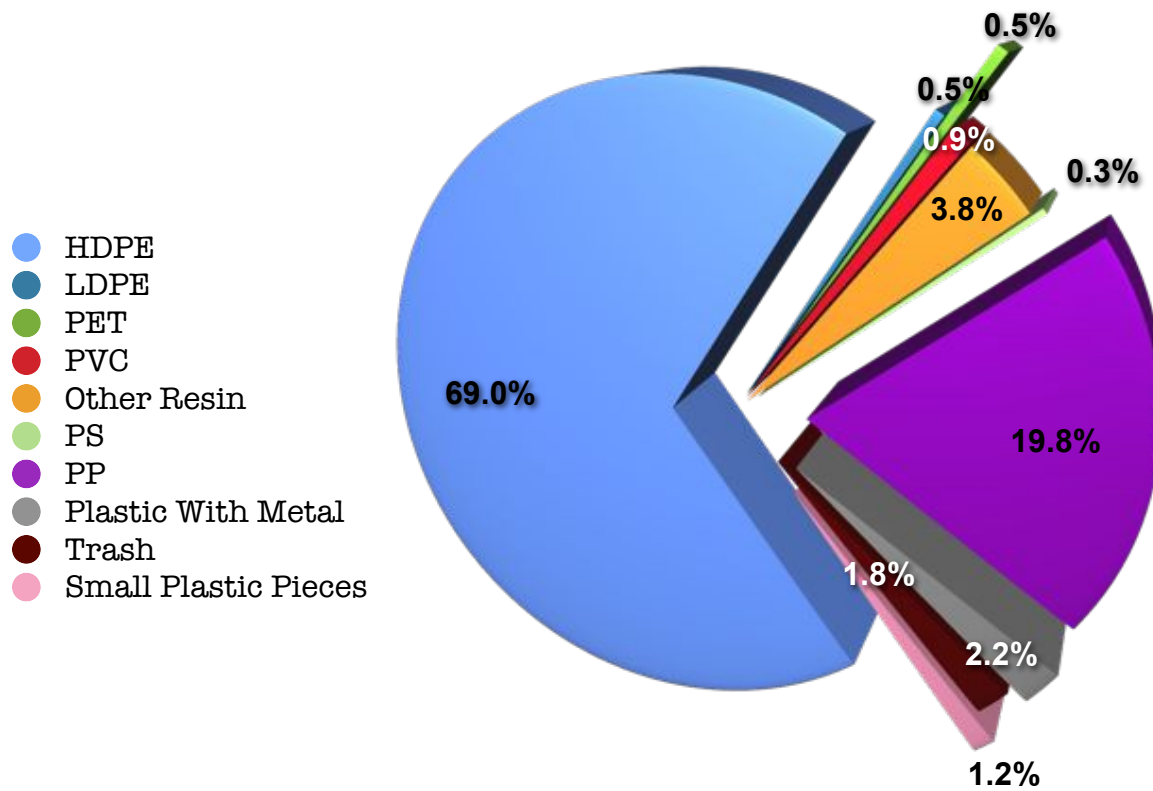
## ***HDPE Injection: Bulky***

*HDPE Injection: Bulky* bales are from MRFs that high-grade their bulky rigid bales to contain predominantly PE and PP plastics (5 gallon buckets can be seen in the photo below), and very little metal or other contaminants.

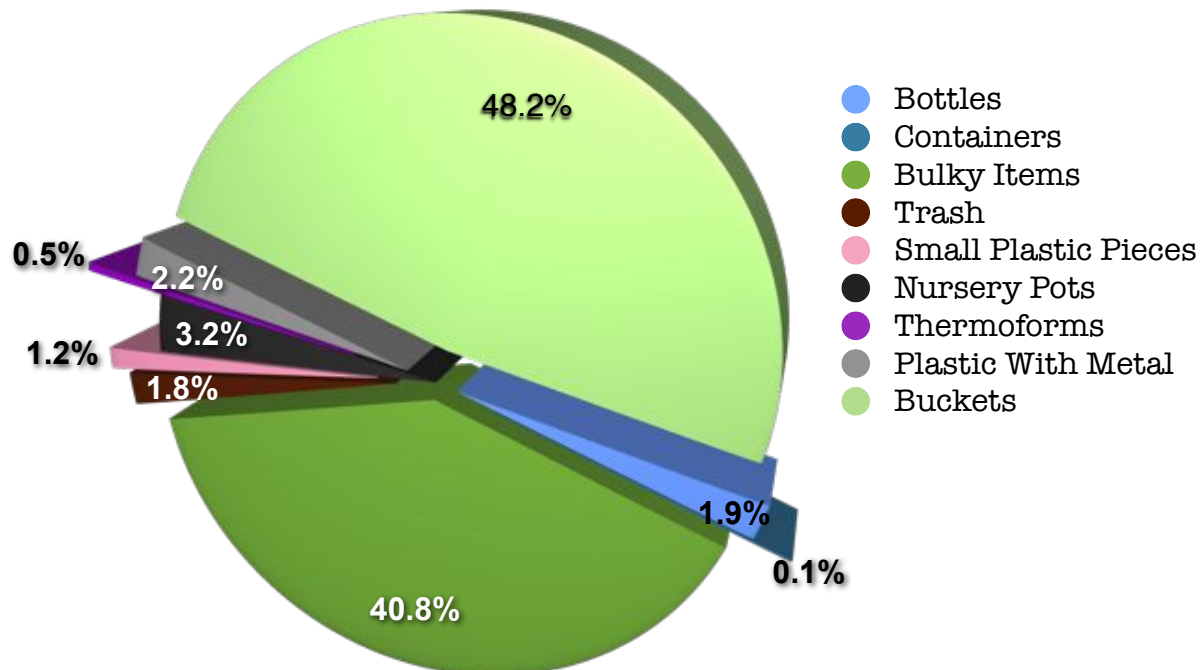




### HDPE Injection: Bulky - By Resin



### HDPE Injection: Bulky - By Product Category



## Major Categories that make up the *HDPE Injection: Bulky* Bale

The following table shows the average percent from the 2014/15 sort. All resin and all product categories that make up .5% or more of the *HDPE Injection: Bulky* bale. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

*HDPE Injection: Bulky*  
Resin & Product Category - % of Bale Sorted

<b><i>HDPE Injection: Bulky</i></b>	<b>2014 / 2015</b>
HDPE Buckets	45.6%
HDPE Bulky Items	20.8%
PP Bulky Items	14.6%
Other Bulky Items	3.8%
PP Nursery Pots	2.5%
PP Buckets	2.5%
Plastic With Metal	2.2%
HDPE Bottles	1.8%
Small Plastic Pieces	1.2%
PVC Bulky Items	0.9%
HDPE Nursery Pots	0.7%
LDPE Bulky Items	0.5%
PET Clamshells, trays, domes, blister packs, produce containers	0.5%
<b>Total Rigid Plastic</b>	<b>98.2%</b>
<b>Trash</b>	<b>1.8%</b>

## HDPE Bottles & Containers - Colored (formerly Colored HDPE Bottles with Olefin Containers)

Two *HDPE Bottles & Containers* bales were sorted one from the Northeast and one from California. Both were generated in a MRF with an auto-sort unit. The average content of these bales was over 90.4% Bottles and only 5.3% Containers, which reflects a change in container packaging since the last sort. A similar bale from the 2010/11 sort had almost 23 percent HDPE containers. The reduced amount of HDPE containers is

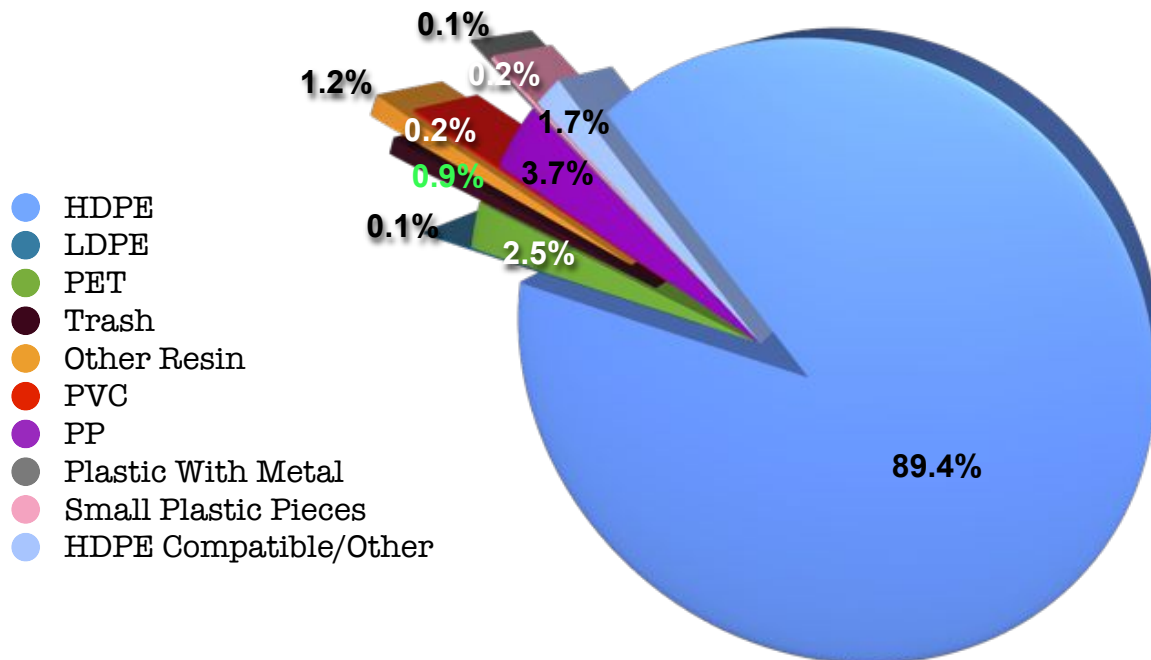


likely due to the shift in container resin to PP from HDPE. Also the reduced amount of PP containers from 7% to 1% also demonstrates the change in bale type, from olefin containers to only HDPE. Basically, the PP portion grew too large to “hide” in these bales and became a material with value separate from HDPE.

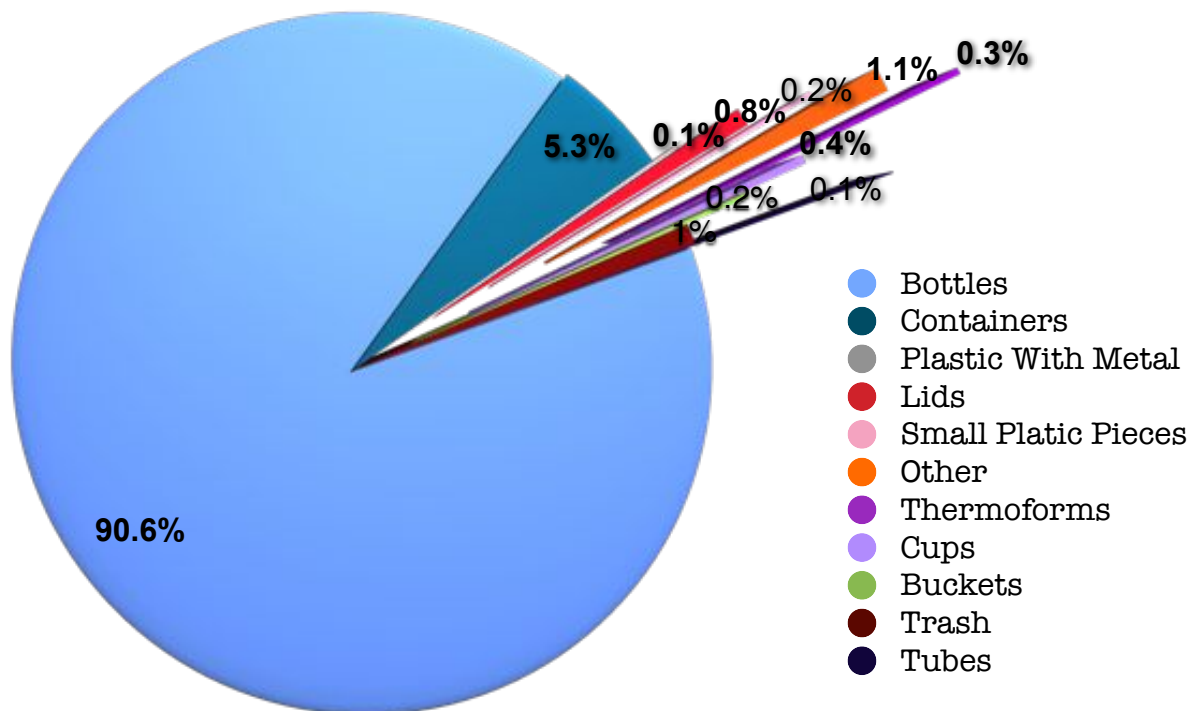
The average of these bales was 89% HDPE and 4% PP and had less than 1% Trash.



### HDPE Bottles & Containers - By Resin Type



### HDPE Bottles & Containers - By Product Category



## Major Categories that make up the *HDPE Bottles & Containers* Bale

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *HDPE Bottles with Containers* bales sorted in either study are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

*HDPE Bottles & Containers*  
Resin & Product Category -Average % of Bales Sorted

<b><i>HDPE Bottles &amp; Containers</i></b>	<b>2014 / 2015</b>	<b>2010 / 2011</b>
HDPE Colored Bottles	77.3%	60.0%
HDPE Natural Bottles	6.9%	1.5%
HDPE Containers	4.2%	22.7%
PET Bottles	2.5%	0.0%
HDPE Compatible/Other Bottles	1.7%	0.0%
PP Containers	1.1%	7.0%
PP Bottles	1.0%	1.7%
Other Bottles	0.9%	0.0%
PP Lids	0.7%	0.0%
HDPE Other	0.5%	0.0%
PP Cups - Color	0.3%	1.6%
Small Plastic Pieces	0.2%	1.1%
<b>Total Rigid Plastic</b>	<b>99.1%</b>	<b>98.3%</b>
<b>Trash</b>	<b>0.9%</b>	<b>1.7%</b>



## ***PP Bottles & Containers***

Three *PP Bottles & Containers* bales were sorted: one from CA, one from PA, and one from GA. One is known to be from an auto-sort system and two others were purported to be auto-sorted. They were relatively consistent with each other—Bottles (25%) and Containers (28%, see photo below) made up the highest percentage in these bales.



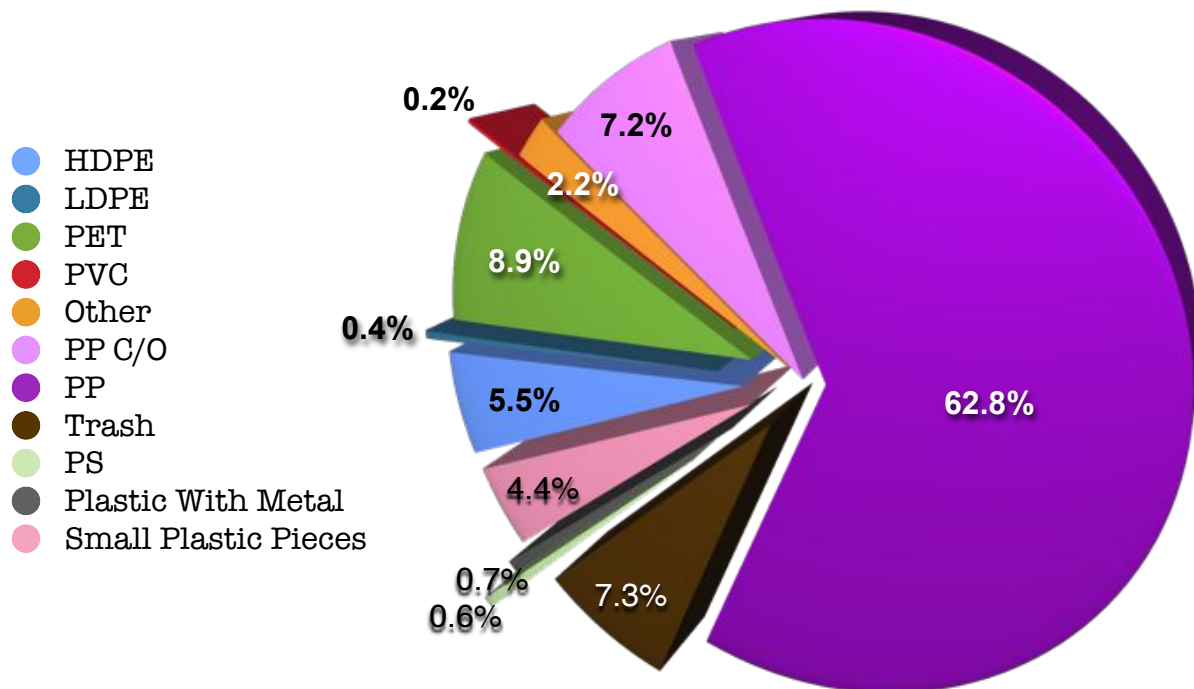
Surprisingly, the average of the bales contained only 63 percent PP and had 7 percent trash compared to the one *PP Bottles & Containers* bale sorted in 2010/11 that had 88 percent PP (of which 31 percent were “compatible/other” bottles) and less than 5 percent trash. While the preponderance of “compatible/other” bottles may have been an anomaly, the 2010 bale

only had 1.4 percent PET compared to almost 10% average in this sort (ranging from 1.5 percent to over 14 percent); no single category of PET was the culprit, it was spread out among all the product categories.

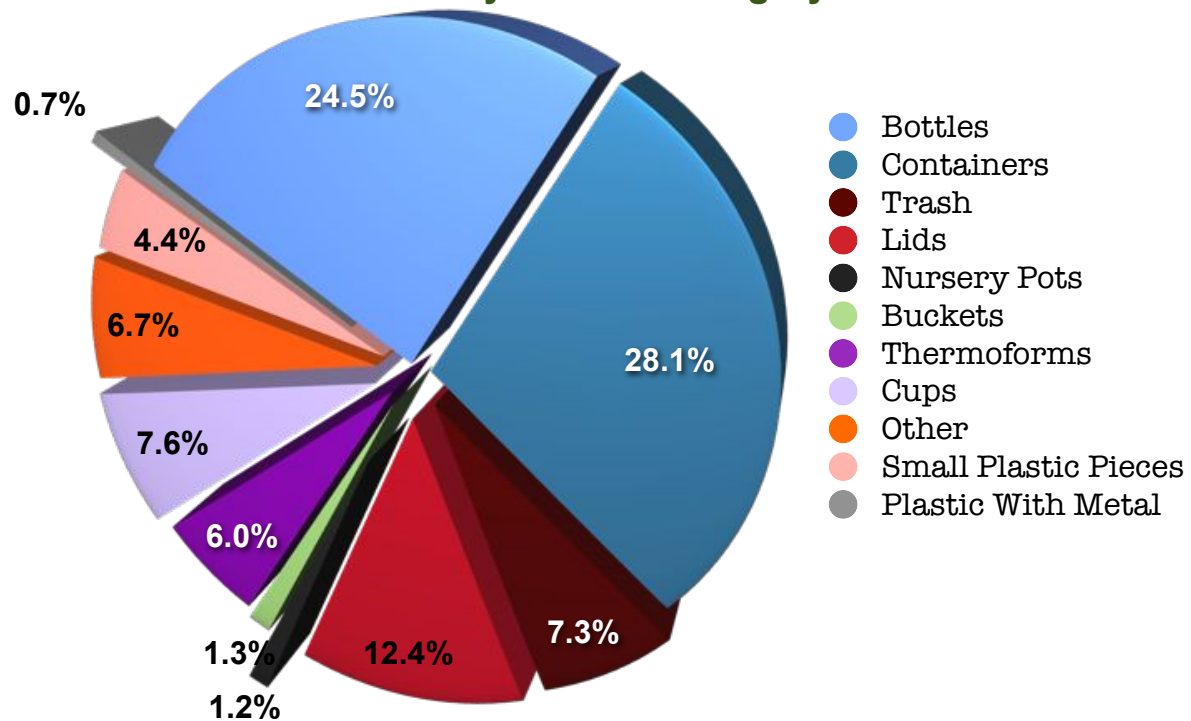




### PP Bottles & Containers - By Resin



### PP Bottles & Containers - By Product Category



## Major Categories that make up the *PP Bottles & Containers*

The following table shows the average percent from the 2014/15 sort and the 2010/11 sort. All resin and all product categories that make up .5% or more of the *PP Bottles & Containers* bales sorted in either year are shown below. Please note that because we have not included all the categories, the individual categories will not add up to the Total. The complete breakdown is in Appendix A & B.

*PP Bottles & Containers*  
Resin & Product Category Average % of Bales Sorted

PP Bale	2014 / 2015	2010 / 2011
PP Containers	27.2%	29.3%
PP Lids	11.5%	0.0%
PP Compatible/Other Bottles	7.2%	31.2%
PP Bottles	6.9%	11.3%
PET Bottles	5.5%	1.4%
PP Other	5.3%	5.5%
Small Plastic Pieces	4.4%	5.4%
PP Cups - Clear	4.4%	3.1%
HDPE Colored & Natural Bottles	4.2%	0.0%
PET Clamshells, trays, domes etc...	3.2%	0.0%
PP Cups - Color	2.7%	3.0%
PP Clamshells, trays, domes etc...	2.5%	0.0%
Other - Other	1.3%	0.0%
PP Buckets	1.1%	1.8%
PP Nursery Pots	1.1%	0.0%
Plastic with Metal	0.7%	0.0%
HDPE Containers	0.6%	0.0%
Other Bottles	0.5%	0.0%
<b>Total Rigid Plastic</b>	<b>92.7%</b>	<b>95.3%</b>
<b>Trash</b>	<b>7.3%</b>	<b>4.7%</b>

# Next Steps

## **Mixed Resin Bale Sorts**

We recommend that the APR Rigid Plastic Recycling Committee ensure that there are future mixed resin bale studies. Future studies will further refine which findings were due to anomalies in the data and how the bale composition changes over time. We hope to see even more consistency over time, especially as APR Model Bale Specifications and standard terminology are more widely adopted. Future studies do not need to be as extensive as this one—perhaps fewer categories or smaller samples—but the data findings will quickly become stale without updating.

It would be very helpful to get feedback from reclaimers, and resin and product manufacturers to make sure that future studies separate materials into the most relevant Product Categories. Do we need more, fewer or different sets?

# Appendices

## Detailed Data: By Product Category

1 of 16

PRODUCT CATEGORY	RESIN	All Rigid Plastic: With Bulky	All Rigid Plastic: No Bulky (Sample 1)	All Rigid Plastic: No Bulky (Sample 2)	All Rigid Plastic: No Bulky (Average)
<i>Bottles</i>	PET	16.3%	26.9%	42.1%	33.6%
<i>Bottles</i>	HDPE - NATURAL	14.3%	15.4%	25.5%	19.8%
<i>Bottles</i>	HDPE - COLOR	6.4%	18.8%	11.9%	15.8%
<i>Bottles</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PP	0.6%	1.3%	0.3%	0.9%
<i>Bottles</i>	PP Compat / Other	0.1%	0.3%	0.1%	0.2%
<i>Bottles</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PC	0.0%	0.1%	0.0%	0.0%
<i>Bottles</i>	PVC	0.0%	0.1%	0.0%	0.0%
<i>Bottles</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	Other	0.1%	0.3%	1.0%	0.6%
<i>Tubes</i>	HDPE	0.0%	0.1%	0.0%	0.0%
<i>Containers</i>	PET	0.1%	0.1%	0.1%	0.1%
<i>Containers</i>	HDPE	0.3%	1.0%	3.3%	2.0%
<i>Containers</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PP	0.6%	3.7%	2.5%	3.2%
<i>Containers</i>	PS	0.0%	0.1%	0.1%	0.1%
<i>Containers</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	OTHER	0.2%	0.1%	0.0%	0.1%
<i>Cups</i>	PET: CLEAR - Printed	0.1%	0.3%	0.0%	0.2%
<i>Cups</i>	PET: CLEAR - Minimal Print	0.0%	0.0%	0.1%	0.1%
<i>Cups</i>	PET: WHITE - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: CLEAR - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>cups</i>	PS: CLEAR - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: COLORED	0.0%	0.1%	0.0%	0.1%
<i>Cups</i>	PLA	0.0%	0.1%	0.0%	0.0%
<i>Cups</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Printed	0.1%	0.1%	0.6%	0.3%
<i>Cups</i>	PP: CLEAR - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: WHITE - Printed	0.0%	0.1%	0.4%	0.2%
<i>Cups</i>	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	HDPE	0.0%	0.6%	0.2%	0.5%
<i>Lids</i>	LDPE	0.0%	0.6%	0.6%	0.6%
<i>Lids</i>	PE	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	PP	0.6%	1.6%	0.4%	1.1%
<i>Lids</i>	PS	0.0%	0.1%	0.1%	0.1%
<i>Lids</i>	PET	0.0%	0.1%	0.0%	0.0%
<i>Lids</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	Other	0.0%	0.0%	0.0%	0.0%

## Detailed Data: By Product Category

2 of 16

PRODUCT CATEGORY	RESIN	All Rigid Plastic: With Bulky	All Rigid Plastic: No Bulky (Sample 1)	All Rigid Plastic: No Bulky (Sample 2)	All Rigid Plastic: No Bulky (Average)
<i>Thermoforms</i>	PET	0.9%	5.9%	3.7%	5.0%
<i>Thermoforms</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.0%	0.5%	0.1%	0.3%
<i>Thermoforms</i>	PS	0.0%	0.2%	0.2%	0.2%
<i>Thermoforms</i>	PP	0.1%	0.7%	0.4%	0.6%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl square</i>	PP	0.3%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	HDPE	2.2%	0.3%	0.0%	0.2%
<i>Buckets - 2-4 gl round</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	4.4%	5.3%	1.7%	3.7%
<i>Buckets - 5 gl plus</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	0.0%	1.3%	0.0%	0.7%
<i>Nursery Pots</i>	PP	0.0%	0.3%	0.1%	0.2%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	26.8%	4.7%	1.7%	3.3%
<i>Bulky Items</i>	PP	2.8%	0.0%	1.2%	0.5%
<i>Bulky Items</i>	LDPE	0.8%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	4.4%	0.0%	0.0%	0.0%
<i>Other</i>	PET	1.5%	0.0%	0.4%	0.2%
<i>Other</i>	HDPE	0.0%	1.4%	0.2%	0.9%
<i>Other</i>	PP	0.0%	0.5%	0.0%	0.3%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.0%	0.1%	0.0%	0.0%
<i>Other</i>	PS	0.0%	0.5%	0.0%	0.3%
<i>Other</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	Other	0.0%	1.3%	0.1%	0.8%
<i>Small Plastic Pieces</i>		5.9%	1.9%	0.4%	1.3%
<i>Plastic With Metal</i>		5.8%	0.0%	0.0%	0.0%
<i>Trash</i>		4.3%	3.2%	0.2%	1.9%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other



## Detailed Data: By Product Category

3 of 16

PRODUCT CATEGORY	RESIN	Pre-Picked Rigid Plastic: No Bulky (Sample 1)	Pre-Picked Rigid Plastic: No Bulky (Sample 2)	Pre-Picked Rigid Plastic: No Bulky (Sample 3)	Pre-Picked Rigid Plastic: No Bulky (Sample 4)
<i>Bottles</i>	PET	12.3%	3.0%	2.9%	2.5%
<i>Bottles</i>	HDPE - NATURAL	2.5%	1.2%	2.7%	0.3%
<i>Bottles</i>	HDPE - COLOR	2.2%	2.0%	1.6%	1.8%
<i>Bottles</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PP	4.0%	3.9%	3.8%	6.1%
<i>Bottles</i>	PP Compat / Other	5.2%	0.5%	0.1%	3.1%
<i>Bottles</i>	LDPE	0.0%	0.0%	0.1%	0.0%
<i>Bottles</i>	PC	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PVC	0.4%	0.2%	0.6%	1.8%
<i>Bottles</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	Other	2.8%	0.7%	0.3%	1.8%
<i>Tubes</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PET	0.8%	0.2%	0.1%	0.0%
<i>Containers</i>	HDPE	2.3%	0.0%	1.1%	0.3%
<i>Containers</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PP	12.7%	20.5%	21.6%	24.6%
<i>Containers</i>	PS	0.7%	0.2%	0.5%	0.8%
<i>Containers</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PVC	0.0%	0.0%	0.2%	0.5%
<i>Containers</i>	OTHER	0.1%	0.3%	0.7%	0.3%
<i>Cups</i>	PET: CLEAR - Printed	0.2%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Minimal Print	0.7%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: CLEAR - Minimal Print	0.1%	0.0%	0.0%	0.5%
<i>cups</i>	PS: CLEAR - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: COLORED	0.1%	0.1%	0.1%	1.0%
<i>Cups</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	Other	0.0%	0.2%	0.0%	0.1%
<i>Cups</i>	PP: CLEAR - Printed	3.0%	6.9%	6.0%	1.8%
<i>Cups</i>	PP: CLEAR - Minimal Print	0.1%	0.7%	0.4%	0.1%
<i>Cups</i>	PP: WHITE - Printed	1.1%	2.5%	2.2%	1.8%
<i>Cups</i>	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: COLORED	0.0%	0.2%	0.3%	0.1%
<i>Lids</i>	HDPE	1.1%	0.0%	0.5%	0.3%
<i>Lids</i>	LDPE	0.1%	0.0%	0.7%	0.3%
<i>Lids</i>	PE	0.4%	0.2%	0.0%	0.0%
<i>Lids</i>	PP	3.0%	8.9%	10.9%	5.9%
<i>Lids</i>	PS	0.0%	0.0%	0.1%	0.3%
<i>Lids</i>	PET	0.1%	0.0%	0.0%	0.3%
<i>Lids</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	Other	0.0%	0.0%	0.6%	0.3%

## Detailed Data: By Product Category

4 of 16

PRODUCT CATEGORY	RESIN	Pre-Picked Rigid Plastic: No Bulky (Sample 1)	Pre-Picked Rigid Plastic: No Bulky (Sample 2)	Pre-Picked Rigid Plastic: No Bulky (Sample 3)	Pre-Picked Rigid Plastic: No Bulky (Sample 4)
<i>Thermoforms</i>	PET	25.7%	2.2%	1.6%	0.6%
<i>Thermoforms</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.4%	0.5%	0.2%	2.5%
<i>Thermoforms</i>	PS	0.5%	0.5%	0.3%	0.5%
<i>Thermoforms</i>	PP	1.9%	8.9%	4.4%	0.7%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.0%	0.0%	0.3%
<i>Buckets - 2-4 gl square</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PP	0.0%	0.0%	0.0%	0.1%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	1.2%	1.2%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	0.0%	1.5%	0.2%	0.1%
<i>Nursery Pots</i>	PP	0.2%	0.7%	1.3%	0.5%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.1%	0.0%	0.0%	0.1%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	0.0%	0.0%	0.1%	0.0%
<i>Bulky Items</i>	PP	0.4%	0.2%	0.0%	0.0%
<i>Bulky Items</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	HDPE	2.3%	0.7%	1.3%	0.0%
<i>Other</i>	PP	5.3%	16.3%	14.9%	3.8%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.0%	0.2%	0.5%	0.0%
<i>Other</i>	PS	0.4%	0.7%	0.2%	0.0%
<i>Other</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	Other	1.1%	2.7%	3.3%	2.8%
<i>Small Plastic Pieces</i>		1.3%	2.0%	1.8%	19.3%
<i>Plastic With Metal</i>		0.7%	1.7%	3.1%	0.8%
<i>Trash</i>		2.2%	6.7%	8.7%	11.7%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Product Category

5 of 16

PRODUCT CATEGORY	RESIN	Pre-Picked Rigid Plastic: No Bulky (Sample 5)	Pre-Picked Rigid Plastic: No Bulky (Sample 6)	Pre-Picked Rigid Plastic: No Bulky (Average)	Pre-Picked Rigid Plastic: With Bulky	Pre-Picked Rigid Plastic: With Bulky (2)
Bottles	PET	2.4%	6.5%	5.7%	2.0%	0.1%
Bottles	HDPE - NATURAL	0.8%	1.3%	1.6%	0.4%	0.0%
Bottles	HDPE - COLOR	2.4%	5.4%	2.4%	1.0%	0.1%
Bottles	HDPE Compat / Other	0.0%	0.1%	0.0%	0.0%	0.0%
Bottles	PP	1.1%	1.0%	3.3%	0.1%	0.0%
Bottles	PP Compat / Other	7.1%	0.0%	3.4%	0.0%	0.0%
Bottles	LDPE	0.0%	0.0%	0.0%	1.1%	0.0%
Bottles	PC	0.1%	0.3%	0.0%	0.0%	0.0%
Bottles	PVC	0.2%	0.0%	0.5%	0.1%	0.0%
Bottles	PS	0.0%	0.0%	0.0%	0.0%	0.0%
Bottles	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
Bottles	Other	0.5%	0.0%	1.2%	0.0%	0.0%
Tubes	HDPE	0.0%	0.0%	0.0%	0.0%	0.0%
Containers	PET	1.2%	0.5%	0.6%	0.0%	0.1%
Containers	HDPE	0.0%	3.7%	1.2%	1.2%	0.0%
Containers	HDPE Compat / Other	0.0%	0.2%	0.0%	0.0%	0.0%
Containers	PP	8.9%	10.1%	15.5%	1.7%	0.0%
Containers	PS	0.3%	0.6%	0.5%	0.1%	0.0%
Containers	LDPE	0.2%	0.0%	0.0%	0.0%	0.0%
Containers	PVC	0.0%	0.0%	0.1%	0.0%	0.0%
Containers	OTHER	0.5%	0.2%	0.3%	0.0%	0.0%
Cups	PET: CLEAR - Printed	0.1%	0.0%	0.1%	0.0%	0.0%
Cups	PET: CLEAR - Minimal Print	0.0%	0.0%	0.2%	0.1%	0.0%
Cups	PET: WHITE - Printed	0.0%	0.0%	0.0%	0.0%	0.0%
Cups	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%	0.0%
Cups	PET: COLORED	0.0%	0.0%	0.0%	0.0%	0.0%
Cups	HDPE	0.1%	0.0%	0.0%	0.0%	0.0%
Cups	PS: CLEAR - Minimal Print	0.2%	0.1%	0.2%	0.1%	0.0%
cups	PS: CLEAR - Printed	0.0%	0.3%	0.0%	0.0%	0.0%
Cups	PS: COLORED	1.8%	0.3%	0.6%	0.8%	0.0%
Cups	PLA	0.1%	0.0%	0.0%	0.0%	0.0%
Cups	Other	0.0%	0.0%	0.0%	0.0%	0.0%
Cups	PP: CLEAR - Printed	2.1%	0.3%	3.3%	0.1%	0.0%
Cups	PP: CLEAR - Minimal Print	0.1%	0.1%	0.2%	0.0%	0.0%
Cups	PP: WHITE - Printed	0.6%	0.0%	1.3%	0.1%	0.0%
Cups	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%	0.0%
Cups	PP: COLORED	0.2%	0.1%	0.1%	0.0%	0.0%
Lids	HDPE	0.3%	1.6%	0.6%	0.0%	0.0%
Lids	LDPE	0.5%	0.5%	0.3%	0.1%	0.0%
Lids	PE	0.0%	0.0%	0.1%	0.0%	0.0%
Lids	PP	9.7%	2.6%	6.7%	0.1%	0.0%
Lids	PS	0.3%	0.3%	0.2%	0.0%	0.0%
Lids	PET	0.0%	0.2%	0.1%	0.0%	0.0%
Lids	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
Lids	Other	0.0%	0.0%	0.1%	0.0%	0.0%

# Detailed Data: By Product Category

6 of 16

PRODUCT CATEGORY	RESIN	Pre-Picked Rigid Plastic: No Bulky (Sample 5)	Pre-Picked Rigid Plastic: No Bulky (Sample 6)	Pre-Picked Rigid Plastic: No Bulky (Average)	Pre-Picked Rigid Plastic: With Bulky	Pre-Picked Rigid Plastic: With Bulky (2)
Thermoforms	PET	3.9%	27.9%	11.3%	3.9%	7.3%
Thermoforms	HDPE	0.0%	0.0%	0.0%	0.0%	0.0%
Thermoforms	PVC	1.7%	3.9%	1.3%	0.2%	0.0%
Thermoforms	PS	1.2%	5.5%	1.1%	0.1%	6.1%
Thermoforms	PP	2.1%	4.5%	3.4%	1.0%	2.6%
Thermoforms	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
Thermoforms	Bio	0.0%	0.0%	0.0%	0.0%	0.0%
Thermoforms	OTHER	0.6%	0.2%	0.2%	0.2%	0.8%
Buckets - 2-4 gl square	PP	0.0%	0.0%	0.0%	0.0%	0.0%
Buckets - 2-4 gl round	HDPE	0.0%	1.0%	0.1%	0.5%	0.0%
Buckets - 2-4 gl round	PP	0.0%	5.5%	0.6%	1.4%	0.0%
Buckets - 2-4 gl round	LDPE	0.0%	0.0%	0.0%	0.0%	0.0%
Buckets - 2-4 gl round	PS	0.0%	0.0%	0.0%	0.0%	0.0%
Buckets - 2-4 gl round	Other	0.0%	0.0%	0.0%	0.0%	0.0%
Buckets - 5 gl plus	HDPE	0.0%	0.2%	0.5%	1.4%	0.2%
Buckets - 5 gl plus	PP	0.0%	0.3%	0.0%	0.0%	0.0%
Buckets - 5 gl plus	LDPE	0.0%	0.0%	0.0%	0.0%	0.0%
Buckets - 5 gl plus	PS	0.0%	0.0%	0.0%	0.0%	0.0%
Buckets - 5 gl plus	Other	0.0%	0.0%	0.0%	0.0%	0.0%
Nursery Pots	HDPE	0.0%	1.0%	0.3%	5.1%	0.6%
Nursery Pots	PP	0.2%	6.2%	1.1%	0.2%	2.1%
Nursery Pots	PET	0.0%	0.0%	0.0%	0.0%	0.0%
Nursery Pots	MIX PE/PP	0.0%	0.0%	0.0%	0.0%	0.0%
Nursery Pots	PS	0.1%	0.0%	0.1%	0.0%	0.0%
Nursery Pots	PVC	0.0%	0.0%	0.0%	0.0%	0.0%
Nursery Pots	OTHER	0.0%	0.0%	0.0%	0.0%	0.0%
Bulky Items	HDPE	0.0%	0.0%	0.0%	23.2%	17.3%
Bulky Items	PP	0.0%	2.3%	0.4%	18.3%	0.0%
Bulky Items	LDPE	0.0%	0.0%	0.0%	2.5%	0.0%
Bulky Items	PET	0.0%	0.0%	0.0%	0.0%	0.0%
Bulky Items	PVC	0.0%	0.0%	0.0%	2.0%	0.0%
Bulky Items	PS	0.0%	0.0%	0.0%	0.2%	0.0%
Bulky Items	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
Bulky Items	Other	0.0%	0.3%	0.0%	4.3%	12.3%
Other	PET	0.0%	0.0%	0.0%	0.0%	0.0%
Other	HDPE	0.0%	0.0%	0.9%	0.0%	0.1%
Other	PP	6.2%	0.0%	7.6%	0.0%	10.2%
Other	LDPE	0.0%	0.0%	0.0%	0.0%	0.0%
Other	PVC	0.0%	0.0%	0.1%	0.0%	0.0%
Other	PS	3.6%	0.0%	1.0%	0.5%	0.0%
Other	PLA	0.0%	0.0%	0.0%	0.0%	0.0%
Other	PC	0.0%	0.0%	0.0%	0.0%	0.0%
Other	Other	2.1%	0.0%	2.0%	0.0%	4.6%
Small Plastic Pieces		4.1%	2.9%	4.6%	5.5%	4.0%
Plastic With Metal		2.1%	0.2%	1.5%	12.0%	18.2%
Trash		30.8%	1.9%	11.2%	8.3%	13.1%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

# Detailed Data: By Resin

1 of 16

RESIN	PRODUCT CATEGORY	All Rigid Plastic: With Bulky	All Rigid Plastic: No Bulky (Sample 1)	All Rigid Plastic: No Bulky (Sample 2)	All Rigid Plastic: No Bulky (Average)
PET	<i>Bottles</i>	16.3%	26.9%	42.1%	33.6%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Containers</i>	0.1%	0.1%	0.1%	0.1%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.1%	0.1%
PET: CLEAR - Printed	<i>Cups</i>	0.1%	0.3%	0.0%	0.2%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.0%	0.1%	0.0%	0.0%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Other</i>	1.5%	0.0%	0.4%	0.2%
PET	<i>Thermoforms</i>	0.9%	5.9%	3.7%	5.0%
HDPE - COLOR	<i>Bottles</i>	6.4%	18.8%	11.9%	15.8%
HDPE - NATURAL	<i>Bottles</i>	14.3%	15.4%	25.5%	19.8%
HDPE	<i>Buckets - 2-4 gl round</i>	2.2%	0.3%	0.0%	0.2%
HDPE	<i>Buckets - 5 gl plus</i>	4.4%	5.3%	1.7%	3.7%
HDPE	<i>Bulky Items</i>	26.8%	4.7%	1.7%	3.3%
HDPE	<i>Containers</i>	0.3%	1.0%	3.3%	2.0%
HDPE	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	0.0%	0.6%	0.2%	0.5%
HDPE	<i>Nursery Pots</i>	0.0%	1.3%	0.0%	0.7%
HDPE	<i>Other</i>	0.0%	1.4%	0.2%	0.9%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.1%	0.0%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.0%	0.1%	0.0%	0.0%
PVC	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.1%	0.0%	0.0%
PVC	<i>Thermoforms</i>	0.0%	0.5%	0.1%	0.3%
LDPE	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.8%	0.0%	0.0%	0.0%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.0%	0.6%	0.6%	0.6%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%

## Detailed Data: By Resin

2 of 16

RESIN	PRODUCT CATEGORY	All Rigid Plastic: With Bulky	All Rigid Plastic: No Bulky (Sample 1)	All Rigid Plastic: No Bulky (Sample 2)	All Rigid Plastic: No Bulky (Average)
PP	<i>Bottles</i>	0.6%	1.3%	0.3%	0.9%
PP	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl square</i>	0.3%	0.0%	0.0%	0.0%
PP	<i>Bulky Items</i>	2.8%	0.0%	1.2%	0.5%
PP	<i>Containers</i>	0.6%	3.7%	2.5%	3.2%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: CLEAR - Printed	<i>Cups</i>	0.1%	0.1%	0.6%	0.3%
PP: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	0.0%	0.1%	0.4%	0.2%
PP	<i>Lids</i>	0.6%	1.6%	0.4%	1.1%
PP	<i>Nursery Pots</i>	0.0%	0.3%	0.1%	0.2%
PP	<i>Other</i>	0.0%	0.5%	0.0%	0.3%
PP	<i>Thermoforms</i>	0.1%	0.7%	0.4%	0.6%
PP Compat / Other	<i>Bottles</i>	0.1%	0.3%	0.1%	0.2%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Containers</i>	0.0%	0.1%	0.1%	0.1%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PS: COLORED	<i>Cups</i>	0.0%	0.1%	0.0%	0.1%
PS	<i>Lids</i>	0.0%	0.1%	0.1%	0.1%
PS	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Other</i>	0.0%	0.5%	0.0%	0.3%
PS	<i>Thermoforms</i>	0.0%	0.2%	0.2%	0.2%
Other	<i>Bottles</i>	0.1%	0.3%	1.0%	0.6%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	4.4%	0.0%	0.0%	0.0%
Other	<i>Containers</i>	0.2%	0.1%	0.0%	0.1%
Other	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Other</i>	0.0%	1.3%	0.1%	0.8%
Other	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
PC	<i>Bottles</i>	0.0%	0.1%	0.0%	0.0%
PC	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.1%	0.0%	0.0%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	5.9%	1.9%	0.4%	1.3%
	<i>Plastic With Metal</i>	5.8%	0.0%	0.0%	0.0%
	<i>Trash</i>	4.3%	3.2%	0.2%	1.9%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other



# Detailed Data: By Resin

3 of 16

RESIN	PRODUCT CATEGORY	Pre-Picked Rigid Plastic: No Bulky (Sample 1)	Pre-Picked Rigid Plastic: No Bulky (Sample 2)	Pre-Picked Rigid Plastic: No Bulky (Sample 3)	Pre-Picked Rigid Plastic: No Bulky (Sample 4)
PET	<i>Bottles</i>	12.3%	3.0%	2.9%	2.5%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Containers</i>	0.8%	0.2%	0.1%	0.0%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.7%	0.0%	0.0%	0.0%
PET: CLEAR - Printed	<i>Cups</i>	0.2%	0.0%	0.0%	0.0%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.1%	0.0%	0.0%	0.3%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	25.7%	2.2%	1.6%	0.6%
HDPE - COLOR	<i>Bottles</i>	2.2%	2.0%	1.6%	1.8%
HDPE - NATURAL	<i>Bottles</i>	2.5%	1.2%	2.7%	0.3%
HDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Buckets - 5 gl plus</i>	1.2%	1.2%	0.0%	0.0%
HDPE	<i>Bulky Items</i>	0.0%	0.0%	0.1%	0.0%
HDPE	<i>Containers</i>	2.3%	0.0%	1.1%	0.3%
HDPE	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	1.1%	0.0%	0.5%	0.3%
HDPE	<i>Nursery Pots</i>	0.0%	1.5%	0.2%	0.1%
HDPE	<i>Other</i>	2.3%	0.7%	1.3%	0.0%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.4%	0.2%	0.6%	1.8%
PVC	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Containers</i>	0.0%	0.0%	0.2%	0.5%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.2%	0.5%	0.0%
PVC	<i>Thermoforms</i>	0.4%	0.5%	0.2%	2.5%
LDPE	<i>Bottles</i>	0.0%	0.0%	0.1%	0.0%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.1%	0.0%	0.7%	0.3%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.4%	0.2%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%

# Detailed Data: By Resin

4 of 16

RESIN	PRODUCT CATEGORY	Pre-Picked Rigid Plastic: No Bulky (Sample 1)	Pre-Picked Rigid Plastic: No Bulky (Sample 2)	Pre-Picked Rigid Plastic: No Bulky (Sample 3)	Pre-Picked Rigid Plastic: No Bulky (Sample 4)
PP	<i>Bottles</i>	4.0%	3.9%	3.8%	6.1%
PP	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.1%
PP	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl square</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Bulky Items</i>	0.4%	0.2%	0.0%	0.0%
PP	<i>Containers</i>	12.7%	20.5%	21.6%	24.6%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.1%	0.7%	0.4%	0.1%
PP: CLEAR - Printed	<i>Cups</i>	3.0%	6.9%	6.0%	1.8%
PP: COLORED	<i>Cups</i>	0.0%	0.2%	0.3%	0.1%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	1.1%	2.5%	2.2%	1.8%
PP	<i>Lids</i>	3.0%	8.9%	10.9%	5.9%
PP	<i>Nursery Pots</i>	0.2%	0.7%	1.3%	0.5%
PP	<i>Other</i>	5.3%	16.3%	14.9%	3.8%
PP	<i>Thermoforms</i>	1.9%	8.9%	4.4%	0.7%
PP Compat / Other	<i>Bottles</i>	5.2%	0.5%	0.1%	3.1%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Containers</i>	0.7%	0.2%	0.5%	0.8%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.1%	0.0%	0.0%	0.5%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PS: COLORED	<i>Cups</i>	0.1%	0.1%	0.1%	1.0%
PS	<i>Lids</i>	0.0%	0.0%	0.1%	0.3%
PS	<i>Nursery Pots</i>	0.1%	0.0%	0.0%	0.1%
PS	<i>Other</i>	0.4%	0.7%	0.2%	0.0%
PS	<i>Thermoforms</i>	0.5%	0.5%	0.3%	0.5%
Other	<i>Bottles</i>	2.8%	0.7%	0.3%	1.8%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Containers</i>	0.1%	0.3%	0.7%	0.3%
Other	<i>Cups</i>	0.0%	0.2%	0.0%	0.1%
Other	<i>Lids</i>	0.0%	0.0%	0.6%	0.3%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Other</i>	1.1%	2.7%	3.3%	2.8%
Other	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.3%
PC	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PC	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	1.3%	2.0%	1.8%	19.3%
	<i>Plastic With Metal</i>	0.7%	1.7%	3.1%	0.8%
	<i>Trash</i>	2.2%	6.7%	8.7%	11.7%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

# Detailed Data: By Resin

5 of 16

RESIN	PRODUCT CATEGORY	Pre-Picked Rigid Plastic: No Bulky (Sample 5)	Pre-Picked Rigid Plastic: No Bulky (Sample 6)	Pre-Picked Rigid Plastic: No Bulky (Average)	Pre-Picked Rigid Plastic: With Bulky	Pre-Picked Rigid Plastic: With Bulky (2)
PET	<i>Bottles</i>	2.4%	6.5%	5.7%	2.0%	0.1%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PET	<i>Containers</i>	1.2%	0.5%	0.6%	0.0%	0.1%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.2%	0.1%	0.0%
PET: CLEAR - Printed	<i>Cups</i>	0.1%	0.0%	0.1%	0.0%	0.0%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.0%	0.2%	0.1%	0.0%	0.0%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	3.9%	27.9%	11.3%	3.9%	7.3%
HDPE - COLOR	<i>Bottles</i>	2.4%	5.4%	2.4%	1.0%	0.1%
HDPE - NATURAL	<i>Bottles</i>	0.8%	1.3%	1.6%	0.4%	0.0%
HDPE	<i>Buckets - 2-4 gl round</i>	0.0%	1.0%	0.1%	0.5%	0.0%
HDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.2%	0.5%	1.4%	0.2%
HDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%	23.2%	17.3%
HDPE	<i>Containers</i>	0.0%	3.7%	1.2%	1.2%	0.0%
HDPE	<i>Cups</i>	0.1%	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	0.3%	1.6%	0.6%	0.0%	0.0%
HDPE	<i>Nursery Pots</i>	0.0%	1.0%	0.3%	5.1%	0.6%
HDPE	<i>Other</i>	0.0%	0.0%	0.9%	0.0%	0.1%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.0%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.1%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.2%	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.2%	0.0%	0.5%	0.1%	0.0%
PVC	<i>Bulky Items</i>	0.0%	0.0%	0.0%	2.0%	0.0%
PVC	<i>Containers</i>	0.0%	0.0%	0.1%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.0%	0.1%	0.0%	0.0%
PVC	<i>Thermoforms</i>	1.7%	3.9%	1.3%	0.2%	0.0%
LDPE	<i>Bottles</i>	0.0%	0.0%	0.0%	1.1%	0.0%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%	2.5%	0.0%
LDPE	<i>Containers</i>	0.2%	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.5%	0.5%	0.3%	0.1%	0.0%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.1%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%	0.0%

# Detailed Data: By Resin

6 of 16

RESIN	PRODUCT CATEGORY	Pre-Picked Rigid Plastic: No Bulky (Sample 5)	Pre-Picked Rigid Plastic: No Bulky (Sample 6)	Pre-Picked Rigid Plastic: No Bulky (Average)	Pre-Picked Rigid Plastic: With Bulky	Pre-Picked Rigid Plastic: With Bulky (2)
PP	Bottles	1.1%	1.0%	3.3%	0.1%	0.0%
PP	Buckets - 2-4 gl round	0.0%	5.5%	0.6%	1.4%	0.0%
PP	Buckets - 5 gl plus	0.0%	0.3%	0.0%	0.0%	0.0%
PP	Buckets - 2-4 gl square	0.0%	0.0%	0.0%	0.0%	0.0%
PP	Bulky Items	0.0%	2.3%	0.4%	18.3%	0.0%
PP	Containers	8.9%	10.1%	15.5%	1.7%	0.0%
PP: CLEAR - Minimal Print	Cups	0.1%	0.1%	0.2%	0.0%	0.0%
PP: CLEAR - Printed	Cups	2.1%	0.3%	3.3%	0.1%	0.0%
PP: COLORED	Cups	0.2%	0.1%	0.1%	0.0%	0.0%
PP: WHITE - Minimal Print	Cups	0.0%	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Printed	Cups	0.6%	0.0%	1.3%	0.1%	0.0%
PP	Lids	9.7%	2.6%	6.7%	0.1%	0.0%
PP	Nursery Pots	0.2%	6.2%	1.1%	0.2%	2.1%
PP	Other	6.2%	0.0%	7.6%	0.0%	10.2%
PP	Thermoforms	2.1%	4.5%	3.4%	1.0%	2.6%
PP Compat / Other	Bottles	7.1%	0.0%	3.4%	0.0%	0.0%
PS	Bottles	0.0%	0.0%	0.0%	0.0%	0.0%
PS	Buckets - 2-4 gl round	0.0%	0.0%	0.0%	0.0%	0.0%
PS	Buckets - 5 gl plus	0.0%	0.0%	0.0%	0.0%	0.0%
PS	Bulky Items	0.0%	0.0%	0.0%	0.2%	0.0%
PS	Containers	0.3%	0.6%	0.5%	0.1%	0.0%
PS: CLEAR - Minimal Print	Cups	0.2%	0.1%	0.2%	0.1%	0.0%
PS: CLEAR - Printed	Cups	0.0%	0.3%	0.0%	0.0%	0.0%
PS: COLORED	Cups	1.8%	0.3%	0.6%	0.8%	0.0%
PS	Lids	0.3%	0.3%	0.2%	0.0%	0.0%
PS	Nursery Pots	0.1%	0.0%	0.1%	0.0%	0.0%
PS	Other	3.6%	0.0%	1.0%	0.5%	0.0%
PS	Thermoforms	1.2%	5.5%	1.1%	0.1%	6.1%
Other	Bottles	0.5%	0.0%	1.2%	0.0%	0.0%
Other	Buckets - 2-4 gl round	0.0%	0.0%	0.0%	0.0%	0.0%
Other	Buckets - 5 gl plus	0.0%	0.0%	0.0%	0.0%	0.0%
Other	Bulky Items	0.0%	0.3%	0.0%	4.3%	12.3%
Other	Containers	0.5%	0.2%	0.3%	0.0%	0.0%
Other	Cups	0.0%	0.0%	0.0%	0.0%	0.0%
Other	Lids	0.0%	0.0%	0.1%	0.0%	0.0%
Other	Nursery Pots	0.0%	0.0%	0.0%	0.0%	0.0%
Other	Other	2.1%	0.0%	2.0%	0.0%	4.6%
Other	Thermoforms	0.6%	0.2%	0.2%	0.2%	0.8%
PC	Bottles	0.1%	0.3%	0.0%	0.0%	0.0%
PC	Other	0.0%	0.0%	0.0%	0.0%	0.0%
PLA	Bottles	0.0%	0.0%	0.0%	0.0%	0.0%
PLA	Bulky Items	0.0%	0.0%	0.0%	0.0%	0.0%
PLA	Cups	0.1%	0.0%	0.0%	0.0%	0.0%
PLA	Lids	0.0%	0.0%	0.0%	0.0%	0.0%
PLA	Other	0.0%	0.0%	0.0%	0.0%	0.0%
PLA	Thermoforms	0.0%	0.0%	0.0%	0.0%	0.0%
Bio	Thermoforms	0.0%	0.0%	0.0%	0.0%	0.0%
	Small Plastic Pieces	4.1%	2.9%	4.6%	5.5%	4.0%
	Plastic With Metal	2.1%	0.2%	1.5%	12.0%	18.2%
	Trash	30.8%	1.9%	11.2%	8.3%	13.1%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

# Detailed Data: By Resin

7 of 16

RESIN	PRODUCT CATEGORY	Tubs & Lids (Sample 1)	Tubs & Lids (Sample 2)	Tubs & Lids (Average)
PET	<i>Bottles</i>	20.0%	0.3%	9.0%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PET	<i>Containers</i>	0.2%	0.0%	0.1%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.1%	0.0%	0.0%
PET: CLEAR - Printed	<i>Cups</i>	0.0%	3.9%	2.2%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.1%	0.0%	0.0%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	4.1%	0.0%	1.8%
HDPE - COLOR	<i>Bottles</i>	1.6%	0.1%	0.8%
HDPE - NATURAL	<i>Bottles</i>	1.4%	0.1%	0.7%
HDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
HDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
HDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%
HDPE	<i>Containers</i>	0.0%	1.3%	0.7%
HDPE	<i>Cups</i>	0.0%	0.3%	0.2%
HDPE	<i>Lids</i>	0.0%	0.6%	0.3%
HDPE	<i>Nursery Pots</i>	0.0%	0.3%	0.2%
HDPE	<i>Other</i>	0.0%	0.0%	0.0%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.4%	0.0%	0.2%
PVC	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PVC	<i>Containers</i>	0.0%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.2%	0.0%	0.1%
PVC	<i>Thermoforms</i>	0.5%	0.0%	0.2%
LDPE	<i>Bottles</i>	0.2%	0.7%	0.5%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.1%	2.4%	1.4%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.1%	0.0%	0.0%

## Detailed Data: By Resin

8 of 16

RESIN	PRODUCT CATEGORY	Tubs & Lids (Sample 1)	Tubs & Lids (Sample 2)	Tubs & Lids (Average)
PP	<i>Bottles</i>	4.1%	17.8%	11.7%
PP	<i>Buckets - 2-4 gl round</i>	0.1%	0.0%	0.0%
PP	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl square</i>	0.0%	0.0%	0.0%
PP	<i>Bulky Items</i>	0.4%	0.0%	0.2%
PP	<i>Containers</i>	19.2%	47.0%	34.7%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.2%	0.0%	0.1%
PP: CLEAR - Printed	<i>Cups</i>	2.1%	4.9%	3.7%
PP: COLORED	<i>Cups</i>	0.0%	0.1%	0.1%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	0.5%	5.2%	3.1%
PP	<i>Lids</i>	7.6%	5.2%	6.3%
PP	<i>Nursery Pots</i>	1.6%	3.5%	2.7%
PP	<i>Other</i>	4.1%	1.3%	2.5%
PP	<i>Thermoforms</i>	2.1%	0.0%	0.9%
PP Compat / Other	<i>Bottles</i>	7.6%	1.5%	4.2%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PS	<i>Containers</i>	0.2%	0.3%	0.3%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PS: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PS	<i>Lids</i>	0.1%	0.0%	0.1%
PS	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PS	<i>Other</i>	0.0%	0.0%	0.0%
PS	<i>Thermoforms</i>	0.1%	0.0%	0.0%
Other	<i>Bottles</i>	0.9%	0.3%	0.6%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	0.0%	0.0%	0.0%
Other	<i>Containers</i>	0.4%	0.1%	0.2%
Other	<i>Cups</i>	0.0%	0.2%	0.1%
Other	<i>Lids</i>	0.1%	0.1%	0.1%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
Other	<i>Other</i>	1.6%	0.1%	0.8%
Other	<i>Thermoforms</i>	0.0%	0.0%	0.0%
PC	<i>Bottles</i>	0.0%	0.0%	0.0%
PC	<i>Other</i>	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.4%	0.3%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	5.7%	1.1%	3.1%
	<i>Plastic With Metal</i>	1.2%	0.0%	0.5%
	<i>Trash</i>	11.3%	0.7%	5.4%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other



# Detailed Data: By Resin

9 of 16

RESIN	PRODUCT CATEGORY	Bulky Rigid Plastic (Sample 1)	Bulky Rigid Plastic(Sample 2)	Bulky Rigid Plastic (Sample 3)	Bulky Rigid Plastic (Average)
PET	<i>Bottles</i>	0.1%	0.1%	0.1%	0.1%
PET	<i>Bulky Items</i>	0.3%	0.0%	0.0%	0.1%
PET	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	0.1%	1.4%	0.1%	0.5%
HDPE - COLOR	<i>Bottles</i>	0.1%	1.0%	1.9%	0.9%
HDPE - NATURAL	<i>Bottles</i>	0.1%	1.9%	1.0%	0.9%
HDPE	<i>Buckets - 2-4 gl round</i>	0.7%	0.0%	0.0%	0.3%
HDPE	<i>Buckets - 5 gl plus</i>	8.2%	6.7%	5.2%	6.7%
HDPE	<i>Bulky Items</i>	30.0%	21.3%	50.8%	34.9%
HDPE	<i>Containers</i>	0.2%	0.2%	0.0%	0.1%
HDPE	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Nursery Pots</i>	2.7%	1.0%	2.5%	2.1%
HDPE	<i>Other</i>	0.1%	0.0%	0.0%	0.0%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.1%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Bulky Items</i>	2.0%	4.6%	1.7%	2.6%
PVC	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Thermoforms</i>	0.1%	0.6%	0.0%	0.2%
LDPE	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	3.8%	0.6%	0.0%	1.6%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.0%	0.1%	0.0%	0.0%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%

## Detailed Data: By Resin

10 of 16

RESIN	PRODUCT CATEGORY	Bulky Rigid Plastic (Sample 1)	Bulky Rigid Plastic (Sample 2)	Bulky Rigid Plastic (Sample 3)	Bulky Rigid Plastic (Average)
PP	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl round</i>	0.1%	1.8%	0.0%	0.5%
PP	<i>Buckets - 5 gl plus</i>	0.0%	4.0%	1.7%	1.7%
PP	<i>Buckets - 2-4 gl square</i>	1.0%	0.0%	2.2%	1.2%
PP	<i>Bulky Items</i>	15.1%	17.3%	19.9%	17.4%
PP	<i>Containers</i>	0.1%	0.0%	0.0%	0.0%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Lids</i>	0.0%	0.0%	0.1%	0.0%
PP	<i>Nursery Pots</i>	0.6%	3.0%	2.1%	1.8%
PP	<i>Other</i>	0.1%	0.0%	0.0%	0.0%
PP	<i>Thermoforms</i>	0.0%	0.1%	0.1%	0.0%
PP Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	1.8%	0.0%	0.5%
PS	<i>Containers</i>	0.1%	0.0%	0.0%	0.0%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PS: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Nursery Pots</i>	0.1%	0.0%	0.0%	0.0%
PS	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Thermoforms</i>	0.0%	1.0%	0.0%	0.3%
Other	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	7.3%	2.9%	5.0%	5.3%
Other	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Other</i>	0.1%	0.0%	0.0%	0.0%
Other	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
PC	<i>Bottles</i>	0.0%	0.6%	0.4%	0.3%
PC	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	0.1%	2.5%	0.0%	0.7%
	<i>Plastic With Metal</i>	12.8%	20.7%	0.0%	10.5%
	<i>Trash</i>	14.1%	4.9%	5.3%	8.5%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

# Detailed Data: By Resin

11 of 16

RESIN	PRODUCT CATEGORY	HDPE Injection: Bulky (Sample 1)	HDPE Injection: Bulky (Sample 2)	HDPE Injection: Bulky (Average)
PET	<i>Bottles</i>	0.0%	0.1%	0.1%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PET	<i>Containers</i>	0.0%	0.0%	0.0%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PET: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.0%	0.0%	0.0%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	0.0%	1.0%	0.5%
HDPE - COLOR	<i>Bottles</i>	0.0%	0.5%	0.2%
HDPE - NATURAL	<i>Bottles</i>	0.0%	3.3%	1.6%
HDPE	<i>Buckets - 2-4 gl round</i>	0.0%	4.3%	2.1%
HDPE	<i>Buckets - 5 gl plus</i>	68.5%	17.9%	43.5%
HDPE	<i>Bulky Items</i>	18.0%	23.6%	20.8%
HDPE	<i>Containers</i>	0.0%	0.0%	0.0%
HDPE	<i>Cups</i>	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	0.0%	0.0%	0.0%
HDPE	<i>Nursery Pots</i>	0.0%	1.4%	0.7%
HDPE	<i>Other</i>	0.0%	0.0%	0.0%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.0%	0.0%	0.0%
PVC	<i>Bulky Items</i>	0.0%	1.9%	0.9%
PVC	<i>Containers</i>	0.0%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.0%	0.0%
PVC	<i>Thermoforms</i>	0.0%	0.0%	0.0%
LDPE	<i>Bottles</i>	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.0%	1.0%	0.5%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.0%	0.0%	0.0%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%

## Detailed Data: By Resin

12 of 16

RESIN	PRODUCT CATEGORY	HDPE Injection: Bulky (Sample 1)	HDPE Injection: Bulky (Sample 2)	HDPE Injection: Bulky (Average)
PP	<i>Bottles</i>	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl round</i>	0.9%	0.4%	0.6%
PP	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl square</i>	0.0%	3.9%	1.9%
PP	<i>Bulky Items</i>	9.1%	20.2%	14.6%
PP	<i>Containers</i>	0.0%	0.1%	0.1%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PP: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PP: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PP	<i>Lids</i>	0.0%	0.1%	0.0%
PP	<i>Nursery Pots</i>	0.0%	5.1%	2.5%
PP	<i>Other</i>	0.0%	0.0%	0.0%
PP	<i>Thermoforms</i>	0.0%	0.0%	0.0%
PP Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	0.6%	0.3%
PS	<i>Containers</i>	0.0%	0.0%	0.0%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PS: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PS	<i>Lids</i>	0.0%	0.0%	0.0%
PS	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PS	<i>Other</i>	0.0%	0.0%	0.0%
PS	<i>Thermoforms</i>	0.0%	0.0%	0.0%
Other	<i>Bottles</i>	0.0%	0.0%	0.0%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	0.7%	6.9%	3.8%
Other	<i>Containers</i>	0.0%	0.0%	0.0%
Other	<i>Cups</i>	0.0%	0.0%	0.0%
Other	<i>Lids</i>	0.0%	0.0%	0.0%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
Other	<i>Other</i>	0.0%	0.0%	0.0%
Other	<i>Thermoforms</i>	0.0%	0.0%	0.0%
PC	<i>Bottles</i>	0.0%	0.0%	0.0%
PC	<i>Other</i>	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.0%	0.0%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	0.0%	2.4%	1.2%
	<i>Plastic With Metal</i>	1.2%	3.2%	2.2%
	<i>Trash</i>	1.6%	2.0%	1.8%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Resin

13 of 16

RESIN	PRODUCT CATEGORY	HDPE Bottles & Containers - Colored (Sample 1)	HDPE Bottles & Containers - Colored (Sample 2)	HDPE Bottles & Containers - Colored (Average)
PET	<i>Bottles</i>	1.4%	3.5%	2.5%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PET	<i>Containers</i>	0.0%	0.0%	0.0%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PET: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.0%	0.0%	0.0%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	0.0%	0.1%	0.1%
HDPE - COLOR	<i>Bottles</i>	85.7%	69.4%	77.3%
HDPE - NATURAL	<i>Bottles</i>	1.6%	11.9%	6.9%
HDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
HDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.4%	0.2%
HDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%
HDPE	<i>Containers</i>	6.6%	1.9%	4.2%
HDPE	<i>Cups</i>	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	0.0%	0.3%	0.1%
HDPE	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
HDPE	<i>Other</i>	0.0%	0.9%	0.5%
HDPE	<i>Thermoforms</i>	0.0%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.1%	0.1%
HDPE Compat / Other	<i>Bottles</i>	2.3%	1.1%	1.7%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.2%	0.1%	0.2%
PVC	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PVC	<i>Containers</i>	0.0%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.0%	0.0%
PVC	<i>Thermoforms</i>	0.0%	0.0%	0.0%
LDPE	<i>Bottles</i>	0.1%	0.0%	0.1%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.0%	0.0%	0.0%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%

## Detailed Data: By Resin

14 of 16

RESIN	PRODUCT CATEGORY	HDPE Bottles & Containers - Colored (Sample 1)	HDPE Bottles & Containers - Colored (Sample 2)	HDPE Bottles & Containers - Colored (Average)
PP	<i>Bottles</i>	1.1%	0.9%	1.0%
PP	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
PP	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl square</i>	0.0%	0.0%	0.0%
PP	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PP	<i>Containers</i>	0.1%	1.9%	1.1%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PP: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PP: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	0.1%	0.4%	0.3%
PP	<i>Lids</i>	0.2%	1.1%	0.7%
PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PP	<i>Other</i>	0.0%	0.6%	0.4%
PP	<i>Thermoforms</i>	0.0%	0.5%	0.2%
PP Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PS	<i>Containers</i>	0.0%	0.0%	0.0%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.0%	0.0%
PS: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%
PS	<i>Lids</i>	0.0%	0.0%	0.0%
PS	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
PS	<i>Other</i>	0.0%	0.0%	0.0%
PS	<i>Thermoforms</i>	0.0%	0.0%	0.0%
Other	<i>Bottles</i>	0.1%	1.7%	0.9%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	0.0%	0.0%	0.0%
Other	<i>Containers</i>	0.0%	0.0%	0.0%
Other	<i>Cups</i>	0.0%	0.0%	0.0%
Other	<i>Lids</i>	0.0%	0.0%	0.0%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%
Other	<i>Other</i>	0.0%	0.4%	0.2%
Other	<i>Thermoforms</i>	0.0%	0.0%	0.0%
PC	<i>Bottles</i>	0.0%	0.0%	0.0%
PC	<i>Other</i>	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.0%	0.0%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	0.0%	0.4%	0.2%
	<i>Plastic With Metal</i>	0.1%	0.1%	0.1%
	<i>Trash</i>	0.0%	1.7%	0.9%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other



# Detailed Data: By Resin

15 of 16

RESIN	PRODUCT CATEGORY	PP Bottles & Containers (Sample 1)	PP Bottles & Containers (Sample 2)	PP Bottles & Containers (Sample 3)	PP Bottles & Containers (Average)
PET	<i>Bottles</i>	1.2%	6.8%	6.2%	5.5%
PET	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Containers</i>	0.0%	0.1%	0.0%	0.0%
PET: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.1%	0.0%	0.1%
PET: CLEAR - Printed	<i>Cups</i>	0.0%	0.1%	0.0%	0.0%
PET: COLORED	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET: WHITE - Printed	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Lids</i>	0.0%	0.1%	0.0%	0.1%
PET	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PET	<i>Thermoforms</i>	0.1%	7.2%	0.6%	3.2%
HDPE - COLOR	<i>Bottles</i>	1.2%	1.4%	4.9%	2.8%
HDPE - NATURAL	<i>Bottles</i>	0.7%	0.4%	2.9%	1.4%
HDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.4%	0.1%
HDPE	<i>Bulky Items</i>	0.0%	0.0%	0.1%	0.0%
HDPE	<i>Containers</i>	0.0%	1.4%	0.1%	0.6%
HDPE	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
HDPE	<i>Lids</i>	0.0%	0.3%	0.1%	0.2%
HDPE	<i>Nursery Pots</i>	0.0%	0.1%	0.2%	0.1%
HDPE	<i>Other</i>	0.0%	0.1%	0.0%	0.0%
HDPE	<i>Thermoforms</i>	0.0%	0.1%	0.0%	0.0%
HDPE	<i>Tubes</i>	0.0%	0.0%	0.1%	0.0%
HDPE Compat / Other	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
HDPE Compat / Other	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Bottles</i>	0.1%	0.1%	0.1%	0.1%
PVC	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PVC	<i>Thermoforms</i>	0.0%	0.2%	0.0%	0.1%
LDPE	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Containers</i>	0.0%	0.0%	0.0%	0.0%
LDPE	<i>Lids</i>	0.0%	0.6%	0.4%	0.4%
LDPE	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PE	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
MIX PE/PP	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%

# Detailed Data: By Resin

16 of 16

RESIN	PRODUCT CATEGORY	PP Bottles & Containers (Sample 1)	PP Bottles & Containers (Sample 2)	PP Bottles & Containers (Sample 3)	PP Bottles & Containers (Average)
PP	<i>Bottles</i>	10.2%	3.5%	8.7%	6.9%
PP	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Buckets - 2-4 gl square</i>	0.0%	2.8%	0.0%	1.1%
PP	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PP	<i>Containers</i>	35.7%	28.0%	22.4%	27.2%
PP: CLEAR - Minimal Print	<i>Cups</i>	0.7%	0.6%	0.1%	0.4%
PP: CLEAR - Printed	<i>Cups</i>	4.7%	5.6%	2.0%	4.0%
PP: COLORED	<i>Cups</i>	0.0%	0.1%	0.1%	0.1%
PP: WHITE - Minimal Print	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PP: WHITE - Printed	<i>Cups</i>	2.2%	4.9%	0.6%	2.6%
PP	<i>Lids</i>	7.7%	11.8%	13.1%	11.5%
PP	<i>Nursery Pots</i>	0.2%	2.1%	0.5%	1.1%
PP	<i>Other</i>	14.5%	3.1%	3.1%	5.3%
PP	<i>Thermoforms</i>	1.0%	2.8%	2.8%	2.5%
PP Compat / Other	<i>Bottles</i>	3.0%	1.9%	14.5%	7.2%
PS	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Containers</i>	0.0%	0.1%	0.1%	0.1%
PS: CLEAR - Minimal Print	<i>Cups</i>	0.0%	0.1%	0.0%	0.1%
PS: CLEAR - Printed	<i>Cups</i>	0.0%	0.1%	0.1%	0.0%
PS: COLORED	<i>Cups</i>	0.0%	0.5%	0.1%	0.2%
PS	<i>Lids</i>	0.0%	0.1%	0.0%	0.1%
PS	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PS	<i>Thermoforms</i>	0.0%	0.2%	0.1%	0.1%
Other	<i>Bottles</i>	1.0%	0.1%	0.6%	0.5%
Other	<i>Buckets - 2-4 gl round</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Buckets - 5 gl plus</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Containers</i>	0.2%	0.1%	0.1%	0.1%
Other	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Lids</i>	0.5%	0.1%	0.1%	0.2%
Other	<i>Nursery Pots</i>	0.0%	0.0%	0.0%	0.0%
Other	<i>Other</i>	2.2%	0.6%	1.4%	1.3%
Other	<i>Thermoforms</i>	0.0%	0.1%	0.0%	0.1%
PC	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PC	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bottles</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Bulky Items</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Cups</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Lids</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Other</i>	0.0%	0.0%	0.0%	0.0%
PLA	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
Bio	<i>Thermoforms</i>	0.0%	0.0%	0.0%	0.0%
	<i>Small Plastic Pieces</i>	3.0%	4.0%	5.4%	4.4%
	<i>Plastic With Metal</i>	0.1%	0.0%	1.6%	0.7%
	<i>Trash</i>	8.7%	7.4%	6.5%	7.3%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Product Category

7 of 16

PRODUCT CATEGORY	RESIN	Tubs & Lids (Sample 1)	Tubs & Lids (Sample 2)	Tubs & Lids (Average)
<b>Bottles</b>	<b>PET</b>	<b>20.0%</b>	<b>0.3%</b>	<b>9.0%</b>
<b>Bottles</b>	<b>HDPE - NATURAL</b>	<b>1.4%</b>	<b>0.1%</b>	<b>0.7%</b>
<b>Bottles</b>	<b>HDPE - COLOR</b>	<b>1.6%</b>	<b>0.1%</b>	<b>0.8%</b>
<b>Bottles</b>	<b>HDPE Compat / Other</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Bottles</b>	<b>PP</b>	<b>4.1%</b>	<b>17.8%</b>	<b>11.7%</b>
<b>Bottles</b>	<b>PP Compat / Other</b>	<b>7.6%</b>	<b>1.5%</b>	<b>4.2%</b>
<b>Bottles</b>	<b>LDPE</b>	<b>0.2%</b>	<b>0.7%</b>	<b>0.5%</b>
<b>Bottles</b>	<b>PC</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Bottles</b>	<b>PVC</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.2%</b>
<b>Bottles</b>	<b>PS</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Bottles</b>	<b>PLA</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Bottles</b>	<b>Other</b>	<b>0.9%</b>	<b>0.3%</b>	<b>0.6%</b>
<b>Tubes</b>	<b>HDPE</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Containers</b>	<b>PET</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>
<b>Containers</b>	<b>HDPE</b>	<b>0.0%</b>	<b>1.3%</b>	<b>0.7%</b>
<b>Containers</b>	<b>HDPE Compat / Other</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Containers</b>	<b>PP</b>	<b>19.2%</b>	<b>47.0%</b>	<b>34.7%</b>
<b>Containers</b>	<b>PS</b>	<b>0.2%</b>	<b>0.3%</b>	<b>0.3%</b>
<b>Containers</b>	<b>LDPE</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Containers</b>	<b>PVC</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Containers</b>	<b>OTHER</b>	<b>0.4%</b>	<b>0.1%</b>	<b>0.2%</b>
<b>Cups</b>	<b>PET: CLEAR - Printed</b>	<b>0.0%</b>	<b>3.9%</b>	<b>2.2%</b>
<b>Cups</b>	<b>PET: CLEAR - Minimal Print</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>PET: WHITE - Printed</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>PET: WHITE - Minimal Print</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>PET: COLORED</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>HDPE</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.2%</b>
<b>Cups</b>	<b>PS: CLEAR - Minimal Print</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>cups</b>	<b>PS: CLEAR - Printed</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>PS: COLORED</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>PLA</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.3%</b>
<b>Cups</b>	<b>Other</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.1%</b>
<b>Cups</b>	<b>PP: CLEAR - Printed</b>	<b>2.1%</b>	<b>4.9%</b>	<b>3.7%</b>
<b>Cups</b>	<b>PP: CLEAR - Minimal Print</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>
<b>Cups</b>	<b>PP: WHITE - Printed</b>	<b>0.5%</b>	<b>5.2%</b>	<b>3.1%</b>
<b>Cups</b>	<b>PP: WHITE - Minimal Print</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Cups</b>	<b>PP: COLORED</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>
<b>Lids</b>	<b>HDPE</b>	<b>0.0%</b>	<b>0.6%</b>	<b>0.3%</b>
<b>Lids</b>	<b>LDPE</b>	<b>0.1%</b>	<b>2.4%</b>	<b>1.4%</b>
<b>Lids</b>	<b>PE</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Lids</b>	<b>PP</b>	<b>7.6%</b>	<b>5.2%</b>	<b>6.3%</b>
<b>Lids</b>	<b>PS</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.1%</b>
<b>Lids</b>	<b>PET</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Lids</b>	<b>PLA</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Lids</b>	<b>Other</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>

## Detailed Data: By Product Category

8 of 16

PRODUCT CATEGORY	RESIN	Tubs & Lids (Sample 1)	Tubs & Lids (Sample 2)	Tubs & Lids (Average)
<i>Thermoforms</i>	PET	4.1%	0.0%	1.8%
<i>Thermoforms</i>	HDPE	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.5%	0.0%	0.2%
<i>Thermoforms</i>	PS	0.1%	0.0%	0.0%
<i>Thermoforms</i>	PP	2.1%	0.0%	0.9%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl square</i>	PP	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	HDPE	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PP	0.1%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PP	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	0.0%	0.3%	0.2%
<i>Nursery Pots</i>	PP	1.6%	3.5%	2.7%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.1%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PP	0.4%	0.0%	0.2%
<i>Bulky Items</i>	LDPE	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PET	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PVC	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PS	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	0.0%	0.0%	0.0%
<i>Other</i>	PET	0.0%	0.0%	0.0%
<i>Other</i>	HDPE	0.0%	0.0%	0.0%
<i>Other</i>	PP	4.1%	1.3%	2.5%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.2%	0.0%	0.1%
<i>Other</i>	PS	0.0%	0.0%	0.0%
<i>Other</i>	PLA	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%
<i>Other</i>	Other	1.6%	0.1%	0.8%
<i>Small Plastic Pieces</i>		5.7%	1.1%	3.1%
<i>Plastic With Metal</i>		1.2%	0.0%	0.5%
<i>Trash</i>		11.3%	0.7%	5.4%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Product Category

9 of 16

PRODUCT CATEGORY	RESIN	Bulky Rigid Plastic (Sample 1)	Bulky Rigid Plastic(Sample 2)	Bulky Rigid Plastic (Sample 3)	Bulky Rigid Plastic (Average)
<i>Bottles</i>	PET	0.1%	0.1%	0.1%	0.1%
<i>Bottles</i>	HDPE - NATURAL	0.1%	1.9%	1.0%	0.9%
<i>Bottles</i>	HDPE - COLOR	0.1%	1.0%	1.9%	0.9%
<i>Bottles</i>	HDPE Compat / Other	0.0%	0.1%	0.0%	0.0%
<i>Bottles</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PP Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PC	0.0%	0.6%	0.4%	0.3%
<i>Bottles</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Tubes</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	HDPE	0.2%	0.2%	0.0%	0.1%
<i>Containers</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PP	0.1%	0.0%	0.0%	0.0%
<i>Containers</i>	PS	0.1%	0.0%	0.0%	0.0%
<i>Containers</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: CLEAR - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>cups</i>	PS: CLEAR - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: WHITE - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	LDPE	0.0%	0.1%	0.0%	0.0%
<i>Lids</i>	PE	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	PP	0.0%	0.0%	0.1%	0.0%
<i>Lids</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	Other	0.0%	0.0%	0.0%	0.0%

## Detailed Data: By Product Category

10 of 16

PRODUCT CATEGORY	RESIN	Bulky Rigid Plastic (Sample 1)	Bulky Rigid Plastic (Sample 2)	Bulky Rigid Plastic (Sample 3)	Bulky Rigid Plastic (Average)
<i>Thermoforms</i>	PET	0.1%	1.4%	0.1%	0.5%
<i>Thermoforms</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.1%	0.6%	0.0%	0.2%
<i>Thermoforms</i>	PS	0.0%	1.0%	0.0%	0.3%
<i>Thermoforms</i>	PP	0.0%	0.1%	0.1%	0.0%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl square</i>	PP	1.0%	0.0%	2.2%	1.2%
<i>Buckets - 2-4 gl round</i>	HDPE	0.7%	0.0%	0.0%	0.3%
<i>Buckets - 2-4 gl round</i>	PP	0.1%	1.8%	0.0%	0.5%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	8.2%	6.7%	5.2%	6.7%
<i>Buckets - 5 gl plus</i>	PP	0.0%	4.0%	1.7%	1.7%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	2.7%	1.0%	2.5%	2.1%
<i>Nursery Pots</i>	PP	0.6%	3.0%	2.1%	1.8%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.1%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	30.0%	21.3%	50.8%	34.9%
<i>Bulky Items</i>	PP	15.1%	17.3%	19.9%	17.4%
<i>Bulky Items</i>	LDPE	3.8%	0.6%	0.0%	1.6%
<i>Bulky Items</i>	PET	0.3%	0.0%	0.0%	0.1%
<i>Bulky Items</i>	PVC	2.0%	4.6%	1.7%	2.6%
<i>Bulky Items</i>	PS	0.0%	1.8%	0.0%	0.5%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	7.3%	2.9%	5.0%	5.3%
<i>Other</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	HDPE	0.1%	0.0%	0.0%	0.0%
<i>Other</i>	PP	0.1%	0.0%	0.0%	0.0%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	Other	0.1%	0.0%	0.0%	0.0%
<i>Small Plastic Pieces</i>		0.1%	2.5%	0.0%	0.7%
<i>Plastic With Metal</i>		12.8%	20.7%	0.0%	10.5%
<i>Trash</i>		14.1%	4.9%	5.3%	8.5%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Product Category

11 of 16

PRODUCT CATEGORY	RESIN	HDPE Injection: Bulky (Sample 1)	HDPE Injection: Bulky (Sample 2)	HDPE Injection: Bulky (Average)
<i>Bottles</i>	PET	0.0%	0.1%	0.1%
<i>Bottles</i>	HDPE - NATURAL	0.0%	3.3%	1.6%
<i>Bottles</i>	HDPE - COLOR	0.0%	0.5%	0.2%
<i>Bottles</i>	HDPE Compat / Other	0.0%	0.0%	0.0%
<i>Bottles</i>	PP	0.0%	0.0%	0.0%
<i>Bottles</i>	PP Compat / Other	0.0%	0.0%	0.0%
<i>Bottles</i>	LDPE	0.0%	0.0%	0.0%
<i>Bottles</i>	PC	0.0%	0.0%	0.0%
<i>Bottles</i>	PVC	0.0%	0.0%	0.0%
<i>Bottles</i>	PS	0.0%	0.0%	0.0%
<i>Bottles</i>	PLA	0.0%	0.0%	0.0%
<i>Bottles</i>	Other	0.0%	0.0%	0.0%
<i>Tubes</i>	HDPE	0.0%	0.0%	0.0%
<i>Containers</i>	PET	0.0%	0.0%	0.0%
<i>Containers</i>	HDPE	0.0%	0.0%	0.0%
<i>Containers</i>	HDPE Compat / Other	0.0%	0.0%	0.0%
<i>Containers</i>	PP	0.0%	0.1%	0.1%
<i>Containers</i>	PS	0.0%	0.0%	0.0%
<i>Containers</i>	LDPE	0.0%	0.0%	0.0%
<i>Containers</i>	PVC	0.0%	0.0%	0.0%
<i>Containers</i>	OTHER	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PET: COLORED	0.0%	0.0%	0.0%
<i>Cups</i>	HDPE	0.0%	0.0%	0.0%
<i>Cups</i>	PS: CLEAR - Minimal Print	0.0%	0.0%	0.0%
<i>cups</i>	PS: CLEAR - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PS: COLORED	0.0%	0.0%	0.0%
<i>Cups</i>	PLA	0.0%	0.0%	0.0%
<i>Cups</i>	Other	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PP: WHITE - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PP: COLORED	0.0%	0.0%	0.0%
<i>Lids</i>	HDPE	0.0%	0.0%	0.0%
<i>Lids</i>	LDPE	0.0%	0.0%	0.0%
<i>Lids</i>	PE	0.0%	0.0%	0.0%
<i>Lids</i>	PP	0.0%	0.1%	0.0%
<i>Lids</i>	PS	0.0%	0.0%	0.0%
<i>Lids</i>	PET	0.0%	0.0%	0.0%
<i>Lids</i>	PLA	0.0%	0.0%	0.0%
<i>Lids</i>	Other	0.0%	0.0%	0.0%



## Detailed Data: By Product Category

12 of 16

PRODUCT CATEGORY	RESIN	HDPE Injection: Bulky (Sample 1)	HDPE Injection: Bulky (Sample 2)	HDPE Injection: Bulky (Average)
<i>Thermoforms</i>	PET	0.0%	1.0%	0.5%
<i>Thermoforms</i>	HDPE	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PS	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PP	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl square</i>	PP	0.0%	3.9%	1.9%
<i>Buckets - 2-4 gl round</i>	HDPE	0.0%	4.3%	2.1%
<i>Buckets - 2-4 gl round</i>	PP	0.9%	0.4%	0.6%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	68.5%	17.9%	43.5%
<i>Buckets - 5 gl plus</i>	PP	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	0.0%	1.4%	0.7%
<i>Nursery Pots</i>	PP	0.0%	5.1%	2.5%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	18.0%	23.6%	20.8%
<i>Bulky Items</i>	PP	9.1%	20.2%	14.6%
<i>Bulky Items</i>	LDPE	0.0%	1.0%	0.5%
<i>Bulky Items</i>	PET	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PVC	0.0%	1.9%	0.9%
<i>Bulky Items</i>	PS	0.0%	0.6%	0.3%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	0.7%	6.9%	3.8%
<i>Other</i>	PET	0.0%	0.0%	0.0%
<i>Other</i>	HDPE	0.0%	0.0%	0.0%
<i>Other</i>	PP	0.0%	0.0%	0.0%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.0%	0.0%	0.0%
<i>Other</i>	PS	0.0%	0.0%	0.0%
<i>Other</i>	PLA	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%
<i>Other</i>	Other	0.0%	0.0%	0.0%
<i>Small Plastic Pieces</i>		0.0%	2.4%	1.2%
<i>Plastic With Metal</i>		1.2%	3.2%	2.2%
<i>Trash</i>		1.6%	2.0%	1.8%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Product Category

13 of 16

PRODUCT CATEGORY	RESIN	HDPE Bottles & Containers - Colored (Sample 1)	HDPE Bottles & Containers - Colored (Sample 2)	HDPE Bottles & Containers - Colored (Average)
<i>Bottles</i>	PET	1.4%	3.5%	2.5%
<i>Bottles</i>	HDPE - NATURAL	1.6%	11.9%	6.9%
<i>Bottles</i>	HDPE - COLOR	85.7%	69.4%	77.3%
<i>Bottles</i>	HDPE Compat / Other	2.3%	1.1%	1.7%
<i>Bottles</i>	PP	1.1%	0.9%	1.0%
<i>Bottles</i>	PP Compat / Other	0.0%	0.0%	0.0%
<i>Bottles</i>	LDPE	0.1%	0.0%	0.1%
<i>Bottles</i>	PC	0.0%	0.0%	0.0%
<i>Bottles</i>	PVC	0.2%	0.1%	0.2%
<i>Bottles</i>	PS	0.0%	0.0%	0.0%
<i>Bottles</i>	PLA	0.0%	0.0%	0.0%
<i>Bottles</i>	Other	0.1%	1.7%	0.9%
<i>Tubes</i>	HDPE	0.0%	0.1%	0.1%
<i>Containers</i>	PET	0.0%	0.0%	0.0%
<i>Containers</i>	HDPE	6.6%	1.9%	4.2%
<i>Containers</i>	HDPE Compat / Other	0.0%	0.0%	0.0%
<i>Containers</i>	PP	0.1%	1.9%	1.1%
<i>Containers</i>	PS	0.0%	0.0%	0.0%
<i>Containers</i>	LDPE	0.0%	0.0%	0.0%
<i>Containers</i>	PVC	0.0%	0.0%	0.0%
<i>Containers</i>	OTHER	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PET: COLORED	0.0%	0.0%	0.0%
<i>Cups</i>	HDPE	0.0%	0.0%	0.0%
<i>Cups</i>	PS: CLEAR - Minimal Print	0.0%	0.0%	0.0%
<i>cups</i>	PS: CLEAR - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PS: COLORED	0.0%	0.0%	0.0%
<i>Cups</i>	PLA	0.0%	0.0%	0.0%
<i>Cups</i>	Other	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Printed	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PP: WHITE - Printed	0.1%	0.4%	0.3%
<i>Cups</i>	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%
<i>Cups</i>	PP: COLORED	0.0%	0.0%	0.0%
<i>Lids</i>	HDPE	0.0%	0.3%	0.1%
<i>Lids</i>	LDPE	0.0%	0.0%	0.0%
<i>Lids</i>	PE	0.0%	0.0%	0.0%
<i>Lids</i>	PP	0.2%	1.1%	0.7%
<i>Lids</i>	PS	0.0%	0.0%	0.0%
<i>Lids</i>	PET	0.0%	0.0%	0.0%
<i>Lids</i>	PLA	0.0%	0.0%	0.0%
<i>Lids</i>	Other	0.0%	0.0%	0.0%

## Detailed Data: By Product Category

14 of 16

PRODUCT CATEGORY	RESIN	HDPE Bottles & Containers - Colored (Sample 1)	HDPE Bottles & Containers - Colored (Sample 2)	HDPE Bottles & Containers - Colored (Average)
<i>Thermoforms</i>	PET	0.0%	0.1%	0.1%
<i>Thermoforms</i>	HDPE	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PS	0.0%	0.0%	0.0%
<i>Thermoforms</i>	PP	0.0%	0.5%	0.2%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl square</i>	PP	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	HDPE	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PP	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	0.0%	0.4%	0.2%
<i>Buckets - 5 gl plus</i>	PP	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PP	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PP	0.0%	0.0%	0.0%
<i>Bulky Items</i>	LDPE	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PET	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PVC	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PS	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	0.0%	0.0%	0.0%
<i>Other</i>	PET	0.0%	0.0%	0.0%
<i>Other</i>	HDPE	0.0%	0.9%	0.5%
<i>Other</i>	PP	0.0%	0.6%	0.4%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.0%	0.0%	0.0%
<i>Other</i>	PS	0.0%	0.0%	0.0%
<i>Other</i>	PLA	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%
<i>Other</i>	Other	0.0%	0.4%	0.2%
<i>Small Plastic Pieces</i>		0.0%	0.4%	0.2%
<i>Plastic With Metal</i>		0.1%	0.1%	0.1%
<i>Trash</i>		0.0%	1.7%	0.9%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other

## Detailed Data: By Product Category

15 of 16

PRODUCT CATEGORY	RESIN	PP Bottles & Containers (Sample 1)	PP Bottles & Containers (Sample 2)	PP Bottles & Containers (Sample 3)	PP Bottles & Containers (Average)
<i>Bottles</i>	PET	1.2%	6.8%	6.2%	5.5%
<i>Bottles</i>	HDPE - NATURAL	0.7%	0.4%	2.9%	1.4%
<i>Bottles</i>	HDPE - COLOR	1.2%	1.4%	4.9%	2.8%
<i>Bottles</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PP	10.2%	3.5%	8.7%	6.9%
<i>Bottles</i>	PP Compat / Other	3.0%	1.9%	14.5%	7.2%
<i>Bottles</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PC	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PVC	0.1%	0.1%	0.1%	0.1%
<i>Bottles</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bottles</i>	Other	1.0%	0.1%	0.6%	0.5%
<i>Tubes</i>	HDPE	0.0%	0.0%	0.1%	0.0%
<i>Containers</i>	PET	0.0%	0.1%	0.0%	0.0%
<i>Containers</i>	HDPE	0.0%	1.4%	0.1%	0.6%
<i>Containers</i>	HDPE Compat / Other	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PP	35.7%	28.0%	22.4%	27.2%
<i>Containers</i>	PS	0.0%	0.1%	0.1%	0.1%
<i>Containers</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Containers</i>	OTHER	0.2%	0.1%	0.1%	0.1%
<i>Cups</i>	PET: CLEAR - Printed	0.0%	0.1%	0.0%	0.0%
<i>Cups</i>	PET: CLEAR - Minimal Print	0.0%	0.1%	0.0%	0.1%
<i>Cups</i>	PET: WHITE - Printed	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PET: COLORED	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PS: CLEAR - Minimal Print	0.0%	0.1%	0.0%	0.1%
<i>cups</i>	PS: CLEAR - Printed	0.0%	0.1%	0.1%	0.0%
<i>Cups</i>	PS: COLORED	0.0%	0.5%	0.1%	0.2%
<i>Cups</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: CLEAR - Printed	4.7%	5.6%	2.0%	4.0%
<i>Cups</i>	PP: CLEAR - Minimal Print	0.7%	0.6%	0.1%	0.4%
<i>Cups</i>	PP: WHITE - Printed	2.2%	4.9%	0.6%	2.6%
<i>Cups</i>	PP: WHITE - Minimal Print	0.0%	0.0%	0.0%	0.0%
<i>Cups</i>	PP: COLORED	0.0%	0.1%	0.1%	0.1%
<i>Lids</i>	HDPE	0.0%	0.3%	0.1%	0.2%
<i>Lids</i>	LDPE	0.0%	0.6%	0.4%	0.4%
<i>Lids</i>	PE	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	PP	7.7%	11.8%	13.1%	11.5%
<i>Lids</i>	PS	0.0%	0.1%	0.0%	0.1%
<i>Lids</i>	PET	0.0%	0.1%	0.0%	0.1%
<i>Lids</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Lids</i>	Other	0.5%	0.1%	0.1%	0.2%

## Detailed Data: By Product Category

16 of 16

PRODUCT CATEGORY	RESIN	PP Bottles & Containers (Sample 1)	PP Bottles & Containers (Sample 2)	PP Bottles & Containers (Sample 3)	PP Bottles & Containers (Average)
<i>Thermoforms</i>	PET	0.1%	7.2%	0.6%	3.2%
<i>Thermoforms</i>	HDPE	0.0%	0.1%	0.0%	0.0%
<i>Thermoforms</i>	PVC	0.0%	0.2%	0.0%	0.1%
<i>Thermoforms</i>	PS	0.0%	0.2%	0.1%	0.1%
<i>Thermoforms</i>	PP	1.0%	2.8%	2.8%	2.5%
<i>Thermoforms</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	Bio	0.0%	0.0%	0.0%	0.0%
<i>Thermoforms</i>	OTHER	0.0%	0.1%	0.0%	0.1%
<i>Buckets - 2-4 gl square</i>	PP	0.0%	2.8%	0.0%	1.1%
<i>Buckets - 2-4 gl round</i>	HDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 2-4 gl round</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	HDPE	0.0%	0.0%	0.4%	0.1%
<i>Buckets - 5 gl plus</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Buckets - 5 gl plus</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	HDPE	0.0%	0.1%	0.2%	0.1%
<i>Nursery Pots</i>	PP	0.2%	2.1%	0.5%	1.1%
<i>Nursery Pots</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	MIX PE/PP	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Nursery Pots</i>	OTHER	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	HDPE	0.0%	0.0%	0.1%	0.0%
<i>Bulky Items</i>	PP	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Bulky Items</i>	Other	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PET	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	HDPE	0.0%	0.1%	0.0%	0.0%
<i>Other</i>	PP	14.5%	3.1%	3.1%	5.3%
<i>Other</i>	LDPE	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PVC	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PS	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PLA	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	PC	0.0%	0.0%	0.0%	0.0%
<i>Other</i>	Other	2.2%	0.6%	1.4%	1.3%
<i>Small Plastic Pieces</i>		3.0%	4.0%	5.4%	4.4%
<i>Plastic With Metal</i>		0.1%	0.0%	1.6%	0.7%
<i>Trash</i>		8.7%	7.4%	6.5%	7.3%

PP or HDPE C/O = Labeled PP or HDPE Compatible and Other