Specifications for baled coloured polypropylene (PP)

These generic specifications are for separating PP from other polymers for the purposes of making quality PP packaging and product. It also flags the opportunity within a few years to separate PP by colour and package type to produce food grade recycled PP (rPP) flake to US and EU standards in Australia.

These specifications are voluntary and have been prepared to assist Australian primary sorters, such as Material Recovery Facilities (MRFs), by providing recommendations for sorting, storage and transport.

It is acknowledged that some MRFs and sorters will be able to meet these various specifications and send high quality bales (with low contamination) direct to plastics reprocessors, and others will need to send their baled plastics to other sites for further sorting. Companies sending baled plastics for further sorting may send substantially more mixed plastics than included in these specifications. All MRFs and other sorters should seek details from their customers on their specific requirements.

These specifications have been developed in consultation with experts in the sector based on national and international trends on markets, price, quality, equipment and processes. We acknowledge Plastics Recyclers Europe for the generic template, specifications from The Netherlands, and the contribution of MRF operators, plastics processors and other industry experts in helping prepare this generic specification.

Types of rigid PP

Rigid PP is the third most used plastic in packaging in Australia. It is increasingly used in packaging for food, cleaning products and commercial scale containers. Sorters are encouraged to take account of growing trends to improve PP sorting and processing to recover the following:

* PP natural (clear) such as takeaway and lunch containers, storage boxes and some meat trays.
* PP white or coloured such as ice cream, yoghurt and margarine tubs, and some meat trays.

Other PP products with a potential end market include cleaning products, buckets and commercial scale containers.

PP packaging design

For PP packaging design the following resources are available:

* [Quickstart Guide to Designing for Recyclability: Rigid PP Packaging](https://documents.packagingcovenant.org.au/public-documents/Quickstart%20Guide%20-%20Designing%20for%20Recyclability;%20PP%20Packaging)
* [Action Plan for Problematic and Unnecessary Single-Use Plastic Packaging](https://documents.packagingcovenant.org.au/public-documents/Action%20Plan%20for%20Problematic%20and%20Unnecessary%20Single-Use%20Plastic%20Packaging)
* [Sustainable Packaging Guidelines](https://documents.packagingcovenant.org.au/public-documents/Sustainable%20Packaging%20Guidelines%20(SPGs))

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Instruction: Enter responses into the middle column as appropriate to your operations, outputs and customers. Strike out any characteristics and descriptions that are not relevant.

|  |  |
| --- | --- |
| Supplier information | |
| Company name |  |
| Company address |  |
| Additional sorting information |  |
| Date |  |

|  |  |  |
| --- | --- | --- |
| Specifications for baled coloured polypropylene (PP) | | |
|  | Enter data & response here | Good practice / description of options for responses |
| Characteristics | |  |
| Resin |  | PP |
| Product |  | Rigid Injection moulded or thermoform packaging – ice cream, butter, takeaway food containers, caps and closures. |
| Original source of materials |  | Post-consumer municipal kerbside.  Container Deposit Schemes (CDS).  Commercial sources.  Pre-consumer industrial. |
| Suitable applications |  | Non-food contact PP packaging/product. |
| Colour | \_\_\_\_\_ % coloured  \_\_\_\_\_ % clear | All colours and clear translucent PP.  If you are able to specify the % clear and the % coloured do so. |
| PP content  (min %) |  | If sending to an Australian secondary sorter aim for >94-90% PP by weight or as negotiated.  If sending direct to an Australian compounder aim for 98-99% PP or as negotiated. |
| Impurities | |  |
| Impurities content  (max %) |  | If sending direct to a plastics reprocessor/compounder aim for 98% PP by weight.  For other sorters aim for >90% bottle PP with <10% contamination by weight.Unless otherwise specified, the % limits listed below apply to bales being sent to other sorters. |
| Glass |  | <0.1% by weight. |
| Paper/Card |  | <0.5% by weight. |
| Metals  (max %) |  | <0.1% by weight. |
| Plastic films |  | <1% by weight. |
| PE rigid plastics |  | <5% PE rigid by weight (less PE will greatly improve the value of the bale). |
| Other plastics / Fines / Trash  (max %) |  | <5% (incl PET, PS PVC, laminated plastics). |
| Moisture  (max %) |  | <5% (residue food, liquids, other). |
| Prohibited impurities |  | Organics, rubber, wood, sacks, hazardous waste, medical waste, glass, oxo or degradable material, food contamination, silicone, PET-G, C-PET, PS, textiles. |
| Non-food contact  (max %) |  |  |
| Transport | |  |
| Transport/contract documents |  | The documents will be provided with the delivered bales. |
| Tracking |  | Delivery docket stating source, sorting plant, production date. |
| Truck load  (min, tonne) |  | Tarpaulin truck 17-22 tonne load. Compacted consistent weight/size bales per delivery, ideally sized for pallets, double stacked across truck tray. |
| Bale characteristics | |  |
| Bale size/weight |  | Compacted to 350 kg - 650 kg. Bottles perforated or lids removed.  Stable and stackable bales for greater compaction and stability for transport and handling. |
| Storage |  | Dry storage on concrete hardstand (no gravel included in bales).  Other, please describe. |
| Strapping |  | 4 - 10 straps and not cross-bound or broken. |

Disclaimer

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