

Recycling Quality Information Point (ReQIP)

September 2014 - for further details visit www.resourceassociation.com/reqip



The Resource Association seeks to work with all parts of the recycling supply chain to improve the consistency and quality of recyclate available to UK reprocessors and for legal export to markets in other countries.



















All parts of the recycling supply chain have important roles to play. While the requirement of the end user are critically important in ensuring a healthy and efficient manufacturing base that can use recyclate, this needs resource collectors, MRF sorters, local authorities and the general public to play their part and we hope appreciate the importance of quality to the manufacturer.

Our ReQIP project brings together information from a wide range of reprocessors about their quality requirements for recyclate received by them, and highlights what they class as 'prohibited materials' which affect the integrity of their raw material.

At launch in June 2014, the project co-ordinated the approved input of 36 companies and industry associations, representing the quality specifications information for annual UK recyclate reprocessing of 12,917,800 tonnes of key materials. This includes the range of materials subject to the attention of legislation on separate collection (paper, metals, glass and plastics), as well as wood and green wastes and others such as textiles and batteries

The project will remain a live project, and any reprocessors wishing to add their information to the project are welcome to do so. Contact the Resource Association office on 01943464778 for more details about how to participate.

The table below sets out the quality specifications for recyclable materials. Each table states the name of the material and the acceptable level of contamination for the material if it is to be reprocessed.

Recycling Quality Specifications		Key: CL : Contamination Limit
 CL: 0.50%	Municipal source-separated food wastes going into Wet AD: 0% contamination level for sharps, glass, clinical waste, nappies hazardous/clinical waste as well as for hardcore, concrete, rocks, tiles, ceramics, stones etc. but have a maximum total contamination level of 0.5% covering materials such as paper, card, plastics (by weight), textiles and metals. Food waste should be collected and presented to the facility in an appropriate form as agreed with the facility e.g. bagged, debagged, loose. The End Users want their raw material collected separately from all other recyclables.	 CL: N/A
 CL: 2% [of which max 0.5% plastics]	Garden and co-mingled garden and food wastes going to windrow composting, in-vessel composting and dry AD: 0% contamination level for sharps, glass, clinical waste, nappies or toxic/invasive plants, leaf litter, hazardous/clinical waste by end users; but have a maximum total contamination level of 2% covering materials such as paper, card, plastics (by weight), textiles and metals, as well as for hardcore, concrete, rocks, tiles, ceramics, stones etc. The level of non-compostable plastics should not exceed 0.5% by weight. The End Users want their input material collected separately from all other recyclables.	 CL: 0% to 6%
General Notes for Paper for Recycling It is important to note that "prohibited materials" represent a hazard to health, safety & the environment (i.e. medical waste, hazardous waste etc.) and are not permitted at all. "Non-paper components" include: metals, plastics, glass, textiles, wood etc. "Unwanted material" includes: non-paper products, paper & board detrimental to production, paper of another grade and paper products not suitable for de-inking. See the European material standard for Paper and Board for Recycling EN 643.		
 CL: Max 0.5% non-paper components & 1% non-paper components and other unwanted materials	News & PAMs: The main EN 643 Code for this grade is 1.09.00. The mixture must contain a minimum of 30% of newspapers and a minimum of 30% magazines with the precise percentages of newspapers and magazines above 30% being determined by agreement with the receiving mill. EN 643 states a maximum level of 0.5% contamination limit for "non-paper components" (see definition above); and a maximum level of 1% for "non-paper components and other unwanted material combined" (see definition above). Additional criteria include a maximum moisture level tolerance of 10%.	 CL: 0% to 5%
 CL: Maximum 1.5% Non-paper components & 2.5% to 3% Non-paper components and other unwanted materials	Cardboard: The main EN 643 Codes for these grades are 1.04.00 and 1.05.00. The raw material must contain a minimum percentage of corrugated board depending on the Grade being produced. UK manufacturers want less than 1% contamination as a norm. EN643 states a maximum level of 1.5% contamination limit for "non paper components" (see definition above); and a maximum level of between 2.5% & 3% for "non-paper components and other unwanted material combined" (see definition above). Additional criteria include maximum tolerances on the content of non-corrugated paper and board materials being present (depending on the EN 643 Code) and a maximum moisture level tolerance of 10%.	 CL: 0% to 3%
 CL: Maximum 1.5% Non-paper components & 2.5% to 3% Non-paper components and other unwanted materials	Mixed Papers: The main EN 643 Code for this grade is 1.02.00. The raw material can only contain a maximum of 40% newspapers & magazines. UK manufacturers want as little as 0.5% contamination as a norm. The EN 643 states a maximum level of 1.5% contamination limit for "non-paper components" (see definition above); and a maximum level of 2.5% for "non-paper components and other unwanted material combined" (see definition above). Additional criteria include a maximum moisture level tolerance of 10%. It should be noted that there are a number of Newsprint Paper Mills in the UK that buy Mixed Papers (or EN643 Code 1.01.00) and 'positively sort' from it material that they can recycle. This contains a 'mixture of various grades of paper & board'. It has an EN 643 maximum tolerance limit of 1.5% contamination limit covering the "non-paper components"; and a maximum of 3% for "non-paper components and unwanted material combined".	 CL: 0% to 5%
 CL: 0% to 1%	Glass for re-melt: End Users want bottles and jars as whole as possible. The 1% contamination level is for non-glass material. For Colour mixing re-processors want: 1.5% (colour) in Clear Cullet; <20% Clear & <10% Amber in Green Cullet; <10% Clear & Green in Amber Cullet. Unacceptable contaminants are: hazardous or toxic material, and laboratory glass, chemical containers, needles, syringes etc. Critical contaminants such as ceramics, stone & porcelain, plus Pyrex, vision ware glass pans & microwave plates should be avoided & eliminated wherever possible. UK cullet re-processors downgrade or reject material that contains: general rubbish, foodstuffs, metal, organic material, paper and plastics. Contamination levels for the likes of ceramics are typically 500g to 1,500g/tonne of glass (or 0.15%).	 CL: 0% to 5%
 CL: <5%	Aggregate: UK End Users do not want any clinical or special waste (such as needles and syringes) and no chemical waste or containers containing any liquid or solid hazardous or toxic material. They also do not want any non-container glass (such as monitors, automotive glass or fluorescent tubes). The 5% contamination level by weight refers to non-glass material only (such as aluminium, plastics and steel containers), organics, general refuse and paper. Organics are seen as paper labels and corks. Clearly ceramics are not an issue for this market.	 CL: 1% to 2%
 CL: 3%	Aluminium: UK Manufacturers want zero contamination. As far as aluminium aerosols & foil are concerned the contamination level must be less than 2%. Additional criteria include a moisture level maximum tolerance of 4%. Overseas end users have tolerated slight contamination levels, but this is now tightening.	 CL: 0%
		 CL: 0% to 1%
		 CL: 1% to 5%

Specific contaminants have varying impacts on the suitability of a material for recycling and the market value of this recyclate. The Recycling Information Point (ReQIP) has compiled data from end users to produce the contamination value chart on the other side of this handout. The chart provides information to gauge the effect individual cross contaminants have on the market value of collected recyclate. The value grading system distinguishes between six levels. This ranges from recyclates which can be reasonably mixed together without impacting on price to those that when

mixed together in any notable proportions will lead to reprocessor rejection. The percentage contamination level for each contaminant is also identified in the chart, which is drawn from the Quality Specifications. However, it must be emphasised that the sum of all these levels must not exceed the 'overall contamination level' given for each raw material. In addition, the chart also provides advice for collectors about considerations that should be taken on board when rolling out a collection scheme for specific recyclables.