



Recovered Paper Grade Specification & Information Flip Chart

Highlander International Recycling
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Buyers and sellers of recovered materials



Generic information: Please be aware that for all grades of recovered paper generated, if you are in any doubt about any specific materials and exact grade contents, please contact Highlander International for further information or go to our quality specification details sheet at www.highlanderinternational.co.uk/partnercontent/recovered-materials-specifications.html

Highlander Disclaimer: Highlander International Recycling cannot be held responsible for any claims or complaints received from any other recovered materials buyers when using this grade information sheet as a basis for material quality.

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Paper grade information sheet – Old Corrugated Cardboard (or Cartons or Containers) {Abbreviated: "OCC"} – European Standard EN 643 – 1.05

Also known as: Kraft Lined Strawboard (Abbreviated KLS), Cardboard, 90/10 European OCC, Supermarket corrugated paper and board

Related products: New Kraft Lined Strawboard (Abbreviated NKLS), New Corrugated Kraft Cuttings (Abbreviated NCKC), 100% European OCC



Used paper and board packaging, containing a minimum of 90% of corrugated board, the remaining 10% being solid board, wrapping papers or other mixed papers of useable qualities. The bales should ideally be brown in appearance as this is what is desired by most paper mills. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied. Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials, synthetic materials, synthetic papers.

Commonly used for: Manufacture of corrugated case materials (fluting and test-liner), solid packaging board (Grey-board), pulp products, wrapping papers.

Highlander tip: Upgrade some of your mixed papers and boards by taking advantage of the 10% allowance you have for solid boards, wrapping or mixed papers.

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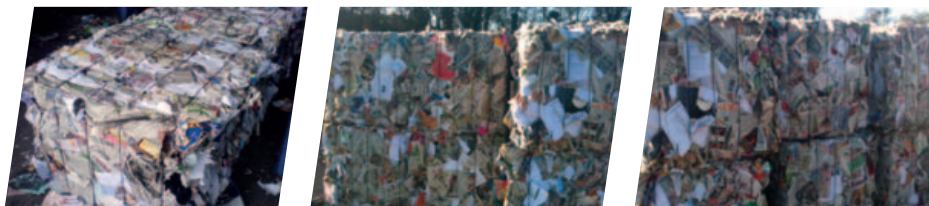
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Paper grade information sheet – News and pams (or News and Mags) {Abbreviated: "N&P"} European Standard EN 643 – 1.08 & 1.09

Also known as: Old Newspaper and Magazines, Mixed newspapers and magazines, News and pamphlets, 70/30 N&P,

Related products: Soft mixed paper, Over issue newspaper (Abbreviated OINP), Over issue pams (Abbreviated OIP), Telephone books



A mixture of newspapers and magazines containing a minimum of 60% of newspapers, with or without glue. It is crucial that material from a co-mingle source is sorted properly to avoid potential claims or complaints – special attention must be taken to ensure removal of OCC / boards, bottles, cans, plastic film etc. Contamination levels allowed here can be as little as 1%, although 2% is the industry norm. Each mill has different policies on telephone directories so check specification before adding these into bales and office paper limits for this grade is normally 8%. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied. Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials, synthetic materials, synthetic papers.

Commonly used for: The manufacture of recycled newsprint, pulp products such as egg boxes or hospital containers, some tissue products such as hand towels.

Highlander tip: Presentation of this grade is of vital importance – make sure the surface of the bales is free from all contamination & that the material is kept dry.

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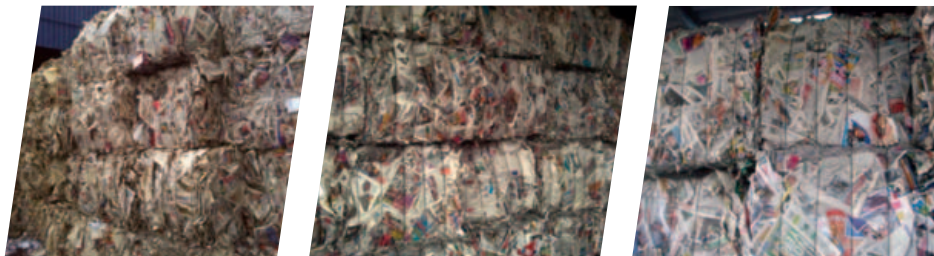
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Paper grade information sheet – Over issue news (or Over issue Newsprint) {Abbreviated: "OINP"} European Standard EN 643 – 2.01 & 2.02

Also known as: Old Newspapers, Mixed newspapers, Once read newspapers, Spoil Waste, Newsprint spoil, Newsprint.

Related products: News and Pams (Abbreviated N&P), Old Newspapers (Abbreviated ONP), Over Issue Pams (Abbreviated OIP), Woody One cuts.



Newspapers, containing a maximum of 5% of newspapers or advertisements coloured in the mass. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied. Many papers now come with poly covered inserts inside so it is imperative to check the specification requirements of each mill as some cannot manage this contaminant which can lead to huge problems for paper machines and potential production disruption. Please be aware of any other **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials, synthetic materials, synthetic papers.

Commonly used for: The manufacture of recycled newsprint, pulp products such as egg boxes or hospital containers, some tissue products such as hand towels.

Highlander tip: Highlander supply niche markets for this material and as a result can offer fixed term contracts for purchase of this grade, with price guarantees.

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Paper grade information sheet – Best White No.1 {Abbreviated: "BW1"} European Standard EN 643 – NA.

Also known as: Pure wood-free white, Pulp Substitute, No.1 White,
Wood-free Mill Broke, Wood-free Mill Trim.

Related products: Best White No.2 (Abbreviated BW2), White heavy letter
(Abbreviated WHL), White Shavings, White Wood-free shavings



The grade to consist of 100% pure white wood-free paper, either slab or shavings, with no coatings or marks of any kind permitted for every bale in the load. The grade must be free from all coated papers and must not contain any paper derived from mechanical pulp, such as unprinted white news or coated mechanical paper. Each bale must be sorted free of all plastic, polythene coated or laminates and must not contain any other contraries such as wet strength or 'stickies'. No off tone woodfree paper is permitted within this grade – material found to contain off tones, coatings or marks will be downgraded to Best white – 2. Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials et al.

Commonly used for: The manufacture of recycled papers for the publishing industry, recycled writing papers, some high-end recycled tissue products.

Highlander tip: There is no margin for error with BW1 as the spec & value is high – if in doubt about the quality of bales, don't load & take lots of loading pictures.

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Paper grade information sheet – Best White No.2 {Abbreviated: "BW2"} European Standard EN 643 – NA.

Also known as: Pure wood-free off white, Pulp Substitute No.2, No.2
White, Wood-free Mill Broke, Wood-free Mill Trim.

Related products: Best White No.1 (Abbreviated BW1), White heavy letter
(Abbreviated WHL), White Shavings, White Wood-free shavings



The grade to consist of up to 100% pure white wood-free paper, either slab or shavings, with some coatings or marks permitted for every bale loaded. The grade must not contain any paper derived from mechanical pulp, e.g. unprinted white news or coated mechanical paper. Each bale must be sorted free of all plastic, polythene coated or laminates & must not contain other contraries such as wet strength or 'stickies. Some off tone / cream wood-free paper is permitted within this grade (5% max) however this varies dependant on the mill supplied – in general, material found to contain off tones, coatings or marks greater than 5% will be downgraded or rejected. Material found to contain paper derived from mechanical pulp, plastic, polythene coated or laminates or any other contraries / contamination such as wet strength or 'stickies or any objectionable material or unacceptable material will be rejected. Please be aware of any **non-paper components** or **foreign matter** in the recovered paper which, during processing, may cause damage to machines, interruptions to paper production.

Commonly used for: The manufacture of recycled papers for the publishing industry, recycled writing papers, some high-end recycled tissue products.

Highlander tip: Each mill has different requirements for BW2 so it is vital to understand the spec – best to have buyers view the material prior to loading.

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Paper grade information sheet – Sorted Office Waste {Abbreviated: "SOW"} – European Standard EN 643 – 2.05.

Also known as: Shredded office waste (Abbreviated SOW), Office Paper, Office Pack, Office Waste, Sorted Office Paper (Abbreviated SOP)

Related products: Multi-grade (Abbreviated MTG), White heavy letter (Abbreviated WHL), Tissue mix, Tear White Shavings, Coloured letters.



General office paper made up of coloured and white letters and business forms which may be shredded. The bales may contain metal pins and fasteners as these can be removed at the mill and may contain no more than 20% of manila envelopes and manila file covers. Carbon paper should not be included. The mechanical content per bale should not exceed 10%. All non bleachable material must not be included as the finished paper will be manufactured white. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials etc

Commonly used for: The manufacture of recycled tissue products in the "away from home" markets such as hand towels, toilet tissue, kitchen roll, handkerchiefs.

Highlander tip: While shredded material is popular in the UK markets, it is far less popular in the European or Far East Markets – be sure before selling!

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Paper grade information sheet – Multi - Grade {Abbreviated: "MTG"} European Standard EN 643 – NA.

Also known as: Printers Mixed, Printers Grade, Mixed Printers Waste,
Multi - printing.

Related products: Sorted Office Waste (Abbreviated SOW), Coloured Best
Pam (Abbreviated CBP), Coloured Letters, Tissue Mixed,



Although this grade varies depending on the paper mill supplied, generally, this consists of a mixture of various papers per bale consisting of between 15 – 20% White Heavy Letter, 30% WF Col. Shavings, 25% Coloured Heavy Letter and a maximum of 15% Coloured Best Pams and 5% Coloured Continuous Stationery. May contain a maximum of 10% mechanical content. Material must be free from latex binders, self adhesive labels, wet strength poly-laminates, and other contraries. Overall the appearance should be bright and light. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied. Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials et al.

Commonly used for: The manufacture of recycled tissue products in the "away from home" markets such as hand towels, toilet tissue, kitchen roll, handkerchiefs.

Highlander tip: This grade can be more attractive on the Far East market as it consists mostly of sheet and slab paper which can be sorted and upgraded easily.

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Paper grade information sheet – White Heavy Letter {Abbreviated: "WHL"} – European Standard EN 643 – 3.05

Also known as: White Letter, White Wood-free Letters,

Related products: Best White No.1 (Abbreviated BW1), Best White 2 (Abbreviated BW2), Tear White Shavings, White Wood-free Computer paper.



Sorted white wood-free writing papers which can be shredded originating from office records however should be free from cash books, carbon paper and non-water soluble adhesives. Each bale in the load should contain no coloured wood-free papers, no mechanical fibres, no coated papers and no manila folders or envelopes. The bales should be white in appearance only – bales found to have coloured wood-free papers, mechanical fibres, coated papers or manila folders or envelopes will be downgraded to Sorted Office Waste. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied. Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials et al.

Commonly used for: The manufacture of recycled tissue products at mills where bleaching is impractical or cost prohibitive, such as toilet tissue & handkerchiefs.

Highlander tip: As sorting / labour costs to produce this grade are high, encourage the potential producers of this grade to separate the material at source.

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Paper grade information sheet – Soft Mixed Paper {Abbreviated: "SMP"} European Standard EN 643 – NA.

Also known as: Municipal Mixed Paper, Super Mixed, De-ink mixed,
Mixed waste, Mixed paper, Sorted mixed paper & board

Related products: News & pams (Abbreviated N&P), Old Corrugated Containers (Abbreviated OCC), Mixed recovered paper & board,



Mixed papers from domestic sources, consisting of predominantly news and pams, with a maximum of 30% of other paper and boards permitted such as cardboard, office papers, post consumer solid board and wrapping papers, and other recyclable domestic packaging. Maximum out-throw levels such as cans, bottles, plastic film and other non paper materials from domestic sources etc permitted at 5% however this can vary dependant on the mill supplied. Moisture levels permitted vary between 10% - 12% and the minimum amount of wires required is three per bale, however this may vary depending on the mill being supplied. Please be aware of any **non-paper components** or any **foreign matter** in the recovered paper and board which, during processing, may cause damage to paper machines or interruptions to paper production or may reduce the value of the finished product e.g. metal, plastic, glass, textiles, wood, sand, building materials et al.

Commonly used for: The manufacture of mass produced recycled board such as writing pad backing board or can be re-sorted for upgrading to news and pams.

Highlander tip: For export, mixed paper attracts most attention from customs officers at foreign ports - ensure all visible bales loaded are especially clean & tidy.