Product names and definitions

Capacity

Practical maximum capacity is the tonnage of paper, paperboard or pulp of normal commercial quality that could be produced per year with full use of equipment and adequate supplies of raw materials and labour, and assuming full demand. No allowance is made for losses due to unscheduled shutdowns, strikes, temporary lack of power, etc., which cause decreases in actual production, but not in production capacity.

Capacity of paper machines that produce more than one grade is apportioned in accordance with actual production patterns or plans for future operation.

Capacity is reported in tonnes of net finished paper and paperboard, and air-dry (10 percent moisture content) pulp.

Changes in capacity

Increases in capacity for years Y, Y+1 and Y+2 of the survey should include committed plans for new machines, i.e. those under way, where ground has been broken, machinery ordered, financing obtained, etc., as well as increases to existing machines.

Changes in capacity should be included only for the portion of the year, which they are actually effective.

Additions to capacity
For new mills and machines, data should reflect the fact that full capacity is only reached after a certain period of operation. For the first 12 months of operation, assume 70 percent of capacity, the next 12 months 90 percent and 100 percent thereafter.

Reductions in capacity
Capacity of machinery, which has been closed down mainly for economic reasons, with no intention of resuming production, should be excluded.

Definitions of pulp

Market pulp is pulp for sale in the open market and does not include pulp used in own plant or shipped to wholly owned or associated companies within the country. All pulp moving outside the producing country is considered to be market pulp.

1. Wood pulp for paper and paperboard [1856][1]
Fibrous material prepared from pulpwood, wood chips, particles or residues by mechanical and/or chemical process for further manufacture into paper, paperboard, fibreboard or other cellulose products. It is an aggregate category, comprising mechanical, thermo-mechanical, semi-chemical and chemical wood pulp.

1.1 Mechanical, thermo-mechanical and semi-chemical wood pulp [16850]
It is an aggregate category comprising mechanical pulp, thermo-mechanical pulp and semi-chemical pulp.

1.11 Mechanical wood pulp [1685.01]
1.111 Mechanical wood pulp, non-coniferous [1685.01.01]
1.112 Mechanical wood pulp, coniferous [1685.01.02]
Wood pulp, including reject pulp, obtained by grinding or milling into their fibres, coniferous or non-coniferous rounds, quarters, billets, etc., or through refining coniferous or non-coniferous chips and particles. Called stone groundwood pulp and refiner groundwood pulp can include pre-treatment with chemical as in chemi-mechanical pulp. It can be bleached or unbleached.
Exclude: Thermo-mechanical wood pulp, defibrated, exploded and groundwood pulp for fibre (building) board.

1.12 Thermo-mechanical wood pulp [1685.02]
1.121 Thermo-mechanical wood pulp, non-coniferous [1685.02.01]
1.122 Thermo-mechanical wood pulp, coniferous [1685.02.02]
Pulp produced by a mechanical process in which wood particles are softened by pre-heating under pressure prior to a pressurized refining stage.

1.13 Semi-chemical wood pulp [16550]

[1] Item code used in FAOSTAT database. The composition of items and sub-items is provided in Table 2.

1.131 Semi-chemical wood pulp, non-coniferous [1655.01]
1.132 Semi-chemical wood pulp, coniferous [1655.02]
Wood pulp, including reject pulp, obtained by subjecting coniferous or non-coniferous wood to a series of mechanical chemical treatments and cooking in a pressure vessel, none of which alone is sufficient to make the fibres separate readily, followed by mechanical treatment. The ratio of the weight of the pulp produced to the weight of wood used is often very high. It can be bleached or unbleached.

1.2 Chemical wood pulp [1656]
Wood pulp obtained by subjecting pulpwood, wood chips, particles or residues to a series of chemical treatments. It may be bleached, semi-bleached or unbleached. It excludes dissolving grades of wood pulp. It is an aggregate category comprising sulphite [1686] and sulphate pulp [1839].

1.21 Chemical wood pulp, sulphite [1686]
Wood pulp obtained by mechanically reducing pulpwood, wood chips, particles or residues to small pieces that are subsequently cooked in a pressure vessel in the presence of a bisulphite cooking liquor. Bisulphites such as ammonium, calcium, magnesium and sodium are commonly used in this process. It excludes dissolving grades of wood pulp. It is an aggregate category, comprising of unbleached sulphite pulp [16660] and bleached sulphite pulp [16610].

1.211 Chemical wood pulp, sulphite, unbleached [16660]
1.2111 Chemical wood pulp, sulphite, unbleached non-coniferous [1660.01]
1.2112 Chemical wood pulp, sulphite, unbleached coniferous [1660.02]
Sulphite pulp, which has not been bleached. Wood pulp, including rejects, obtained by mechanically reducing coniferous or non-coniferous wood to chips, which are subsequently cooked in a pressure vessel in the presence of a bisulphite cooking liquor. Bisulphites such as ammonium, calcium magnesium and sodium, are commonly used.
Exclude: Dissolving grades having very high alpha cellulose content (usually 90 percent or more). These should be included in 3 Dissolving pulp, wood and other raw materials [1858] and 3.1 Dissolving wood pulp, non-coniferous [1858.01].

1.212 Chemical wood pulp, sulphite, bleached [16610]
1.2121 Chemical wood pulp, sulphite, bleached, non-coniferous [1661.01]
1.2122 Chemical wood pulp, sulphite, bleached, coniferous [1661.02]
Sulphite pulp, which has been bleached or partly bleached. Wood pulp, including rejects, obtained by mechanically reducing coniferous or non-coniferous wood to chips which are subsequently cooked in a pressure vessel in the presence of a bisulphite cooking liquor. Bisulphites such as ammonium, calcium magnesium and sodium, are commonly used.
Exclude: Dissolving grades having very high alpha cellulose content (usually 90 percent or more). These should be included in 3 Dissolving pulp, wood and other raw materials [1858] and 3.1 Dissolving wood pulp, non-coniferous [1858.01].

1.22 Chemical wood pulp, sulphate [1839]
Wood pulp obtained by mechanically reducing pulpwood, wood chips, particles or residues to small pieces that are subsequently cooked in a pressure vessel in the presence of sodium hydroxide cooking liquor (soda pulp) or a mixture of sodium hydroxide and sodium sulphite cooking liquor (sulphate pulp). It excludes dissolving grades of wood pulp. It is an aggregate category, comprising of unbleached sulphate pulp [1662] and bleached sulphate pulp [1663].

1.221 Chemical wood pulp, sulphate, unbleached [1662]
1.2211 Chemical wood pulp, sulphate, unbleached, non-coniferous [1662.01]
1.2212 Chemical wood pulp, sulphate, unbleached, coniferous [1662.02]
Sulphate and soda pulp which has not been unbleached. Wood pulp, including rejects, obtained by mechanically reducing coniferous or non-coniferous wood to chips which are subsequently cooked in pressure vessel in presence of sodium hydroxide cooking liquor (soda pulp) or mixture of sodium hydroxide and sodium sulphide cooking liquor (sulphate pulp).
Exclude: Dissolving grades having very high alpha cellulose content (usually 90 percent or more). These should be included in 3 Dissolving pulp, wood and other raw materials [1858] and 3.1 Dissolving wood pulp, non-coniferous [1858.01].

1.222 Chemical wood pulp, sulphate, bleached [1663]
1.2221 Chemical wood pulp, sulphate, bleached non-coniferous [1663.01]
1.2222 Chemical wood pulp, sulphate, bleached coniferous [1663.02]
Sulphate and soda pulp which has been bleached or partly bleached. Wood pulp, including rejects, obtained by mechanically reducing coniferous or non-coniferous wood to chips which are subsequently cooked in pressure vessel in presence of sodium hydroxide cooking liquor (soda pulp) or mixture of sodium hydroxide and sodium sulphide cooking liquor (sulphate pulp).
Exclude: Dissolving grades having very high alpha cellulose content (usually 90 percent or more). These should be included in 3 Dissolving pulp, wood and other raw materials [1858] and 3.1 Dissolving wood pulp, non-coniferous [1858.01].

2. Pulp of other fibre for paper and paperboard [1857]

2.1 Pulp of straw [1857.01]
Pulp obtained from straw by any method. It may be bleached.

2.2 Pulp of bagasse [1857.02]
Pulp obtained from residue from processing sugar cane by any method. It may be bleached.

2.3 Pulp of bamboo [1857.03]
Pulp obtained from bamboo by any method. It may be bleached.

2.4 Pulp of other fibre [1857.04]
Includes pulp obtained by any method from such materials as esparto and other reeds and grass, cotton linters, flax, hemp, rags, other textile wastes. It may be bleached.
Exclude: Dissolving pulp (it should be included in code 3 Dissolving pulp, wood and other raw materials [1858]) and Pulp made from recovered paper.

3. Dissolving pulp, wood and other raw materials [1858]
3.1 Dissolving wood pulp, non-coniferous [1858.01]
3.2 Dissolving wood pulp, coniferous [1858.02]
3.3 Dissolving pulp of fibre other than wood [1858.03]
Highly bleached chemical pulp (sulphate, soda or sulphite) from coniferous or non-coniferous wood, rags, cotton linters, etc., of special quality, with very high alpha cellulose content (usually 90 percent and over) readily adaptable for uses other than papermaking. They are used principally as a source of cellulose in the manufacture of products such as man-made fibres, cellulosic plastic materials, lacquers, explosives, etc.

Definitions of paper and paperboard

The paper products included under this heading are in rolls, strips or sheets. The rolls and strips exceed 15 cm in width and the sheets have no side less than 36 cm.
Exclude: Paper and paperboard cut to any shape other than rectangular.

4. Paper and paperboard [1876]

4.1 Graphic papers [2042]
The graphic papers category is an aggregate category comprising newsprint [1671] and printing and writing papers [1674]. Products in this category are generally manufactured in strips or rolls of a width exceeding 15 cm or in rectangular sheets with one side exceeding 36 cm and the other exceeding 15 cm in the unfolded state. It excludes manufactured paper products such as books and magazines, etc.

4.11 Newsprint [1671]
Uncoated paper, unsized (or only slightly sized), containing at least 65 percent mechanical or thermo-mechanical wood pulp (percent of fibrous content), of the type used mainly for the printing of newspapers, usually weighing not less than 40 g/m^2 and generally not more than 57 g/m^2.
Include: Rotonews.

4.12 Printing and writing papers [1674]
Paper, except newsprint, suitable for printing, writing or other graphic purposes, made from a variety of pulp blends and with various finishes. It may be uncoated and have been subjected to sizing, calendering, supercalendering, glazing, water-marking or similar simple processes, or it may be coated on one or both sides with coating material such as barium sulphate, clay (beneficiated kaolin), gypsum or zinc oxide, often supplemented with supercalendering, etc.
Include: Such papers as: bank note, bible or imitation bible, book and magazine, box lining and covering, bristols, calculator papers, computer paper, duplicating, envelope stock, folder stock, label, lithograph, manifold, offset, onionskin, photographic base paper, poster, stationery, tablet or block, tabulating card stock, typewriter.

4.121 Printing and writing paper, coated [1616]
Printing and writing papers, except newsprint, which have been coated on one or both sides with coating materials such as clay (beneficiated kaolin), barium sulphate, gypsum or zinc oxide, often supplemented with supercalendering, etc.
Include: Coated paper produced at the paper mill from base paper manufactured for own use or purchased, together with all paper made and coated in a single operation on the papermaking machine.

4.1211 Printing and writing paper, coated, wood containing [1616.01]
Coated printed and writing papers, containing 10 percent or more mechanical wood pulp.

4.1212 Printing and writing paper, coated, woodfree [1616.02]
Coated printing and writing papers, containing less than 10 percent mechanical wood pulp.

4.122 Printing and writing paper, uncoated [1869]
Printing and writing papers, except newsprint, which have been subjected to sizing, calendering, supercalendering, glazing, water-marking or similar simple finishing processes, but not to coating.
Exclude: Coating base paper for own use or for sale to other paper mills.

4.1221 Printing and writing paper, uncoated, wood containing [1612]
Uncoated printing and writing papers, except newsprint, containing 10 percent or more mechanical wood pulp.

4.1222 Printing and writing paper, uncoated, woodfree [1615]
Uncoated printing and writing papers, except newsprint, containing less than 10 percent mechanical wood pulp.

4.2 Other paper and paperboard [1675]
Paper and paperboard other than 4.11 Newsprint [1671] and 4.12 Printing and writing papers [1674].

4.21 Household and sanitary paper [1676]
Absorbent paper, creped or uncreped, sometimes embossed, made from bleached or unbleached pulps, recovered paper or combination of these. This type of paper should be sufficiently strong to avoid disintegration or tearing in use. Other important characteristics are high absorptive capacity, retention of absorbed fluids, softness, freedom from lint and unpleasant odours. It is made in white and a variety of colours and in single, double or more plies.
Include: Types of creped and uncreped papers such as disposable tissues, facial tissue, napkin, sanitary wadding, toilet tissue towelling, wiper stock.

4.22 Packaging paper and paperboard [2043]
Paper and paperboard designed for wrapping and packaging purposes made from pulps, recovered paper and any combination of these.

4.221 Linerboard [1842]
Paperboard made either from sulphate pulp (unbleached or bleached) or principally from recovered paper used as facing material on corrugated or solid paper or paperboard boxes and containers.

4.2211 Linerboard, kraft liner [1842.01]
Linerboard made wholly or principally of bleached or unbleached sulphate pulp.

4.22111 Linerboard, kraft liner, unbleached [1842.01.01]
Kraft liner made wholly or principally of unbleached sulphate pulp.
Include: Mottled kraft liner.

4.22112 Linerboard, kraft liner, bleached [1842.01.02]
Kraft liner made wholly or principally of bleached sulphate pulp.
Include: White lined kraft liner.

4.2212 Other linerboard [1842.02]
Linerboard other than kraft liner.

4.222 Fluting medium [1850]
Paper or paperboard used mainly as a corrugating medium in the production of corrugated board. It may be produced wholly or principally from semi-chemical wood pulp or from other materials.

4.2221 Semi-chemical fluting medium [1850.01]
Fluting medium made wholly or principally of semi-chemical wood pulp.

4.2222 Other fluting medium [1850.02]
Fluting medium other than semi-chemical wood pulp.

4.223 Kraft wrapping and packaging papers [16210]
All other papers made wholly or principally from bleached and unbleached sulphate pulp used in the manufacture of single or multi-wall sacks or for other wrapping and packaging purposes.

4.2231 Kraft wrapping and packaging papers, sack kraft [1621.01]
Bleached and unbleached kraft wrapping and packaging paper used in the manufacture of single or multi-wall sacks.

4.2232 Other kraft wrapping and packaging papers [1621.02]
Bleached and unbleached kraft wrapping and packaging papers, other than sack kraft.

4.224 Cartonboard [1618]
Sometimes referred to as folding boxboard. Paperboard with good stiffness, scoring and folding characteristics. These paperboards are made from pulp, recovered paper or any combination of these. They may be plain or coloured throughout the mass, solid, single or multi-ply, coated or uncoated. They include folding, milk carton and food service boxboard.
Include: Such cartonboard as: white or coloured lined duplex and triplex, solid bleached board, chipboard (plain or coloured), folding unbleached kraft board.
Exclude: Non-folding board for shipping cases, which is included in 4.2252 Other packaging paper, not elsewhere specified [1854].

4.2241 Pulp-based cartonboard [1618.01]
This cartonboard is made wholly from chemical pulp or from a combination of chemical and mechanical and/or thermo-mechanical pulps.

4.22411 Bleached chemical pulp cartonboard [1618.01.01]
This cartonboard may be either single-ply boards of bleached chemical pulp or multiply boards with bleached chemical pulp on both sides.

4.22412 Other pulp-based cartonboard [1618.01.02]
This cartonboard is either single-ply, made from an unbleached pulp furnish, or multiply, made from a combination of chemical and mechanical and/or thermo-mechanical pulp.
Exclude: Multiply boards with bleached chemical pulp on both sides which are included in 4.22411 Bleached chemical pulp cartonboard [1618.01.01].

4.2242 Cartonboard produced from recovered paper [1618.02]
Cartonboard manufactured from recovered paper or a combination of recovered paper and pulp.

4.225 Other wrapping and packaging papers, not elsewhere specified [16220]
Paper and paperboard designed for wrapping or packaging purposes, not elsewhere specified.

4.2251 Other wrapping paper, not elsewhere specified [1853]
Papers such as:
(i) Vegetable parchment, greaseproof and glassine.
Papers made from chemical pulps or from mixtures of chemical wood pulp, cotton fibre pulp treated (e.g. highly hydrated or hard beaten) to render the resulting paper resistant to oil, grease and water. The papers are used primarily for packaging of frozen, moist or greasy materials like butter, margarine, meat or fish, as pan liners, release paper, sterilising bags, parchmentising stock and imitations of parchment.
Exclude: Papers that have been rendered greaseproof or waterproof by coat, impregnating or similar processes after manufacture of the paper.
(ii) Wrapping and packaging papers not included under (i) or under code 4.2232 Other kraft wrapping and packaging papers [1621.02].

4.2252 Other packaging paper, not elsewhere specified [1854]
Packaging paperboard not included under codes 4.2211 Linerboard, kraft liner [1842.01], 4.2212 Other linerboard [1842.02], 4.2241 Pulp-based cartonboard [1618.01] and 4.2242 Cartonboard produced from recovered paper [1618.02].
Include: Straw paperboard, non-folding board for shipping cases, set-up boxes, etc.; board used in the manufacture of cores, tubes, cans and drums.
Exclude: Corrugated board, which is considered as converted paperboard, straw paper and paperboard used for corrugated boxes (which is included in 4.2212 Other linerboard [1842.02] and 4.2222 Other fluting medium [1850.02]).

4.23 Other paper and paperboard, not elsewhere specified [1683]
Paper and paperboard not used for packaging purposes manufactured principally from furnishes other than sulphate pulp and not included elsewhere.

4.231 Other paper, not elsewhere specified [1855]
Papers such as:
(i) Special thin paper

These papers are made for special purposes, their common characteristics being their relative thinness. The papers included may be made from mechanical or chemical pulps, bleached or unbleached. The principal characteristics of some of these papers are uniformity of surface and calliper, freedom from pinholes, strength, close formation, opacity, low permeability and chemical purity, all related to special uses.

Include: Such special thin papers as: carbonising tissue, condenser and capacitor paper, electrical paper and tissue, cigarette paper, lens tissue, stencil tissue, pattern tissue, tea bag paper.

Exclude: Thin printing and writing papers such as: bible and imitation bible, manifold, onionskin, airmail stationary stock.

(ii) Kraft paper used for waxing, asphalting, water-proofing, laminating, impregnating, spinning or twisting, gumming, etc.

Exclude: Folding kraft board, which is included in 4.22411 Bleached chemical pulp cartonboard [1618.01.01].

(iii) All other grades of paper not included under earlier headings.

Include: Cable paper, blotting paper, filter paper, rope and jute paper, wallpaper base stock.

4.232 Other paperboard, not elsewhere specified [1880]

Paperboards not included elsewhere, such as:

(i) Construction paper and paperboard

Papers, paper felts and paperboards used in construction of buildings and other structures for insulation, vapour seal, roofing and flooring underlay, etc. They are made from fully refined material such as wood pulp, recovered paper, other vegetable pulp and mineral fibre. Low thermal conductivity, moisture resistance, fire resistance, permanency, insect and vermin resistance are desirable characteristics of these materials.

Exclude:

a) Papers, paper felts or boards impregnated, saturated, laminated or further manufactured in any way (i.e. converted).

b) Fibreboard (fibre building board) in the form of insulating board, medium hardboard and hardboard.

(ii) All other grades of paperboard not included under earlier headings

Include: Beer mat board, gasket board, index pressboard, matrix board, panelboard (automotive), press textile board, shoe board, transformer board, trunk and suitcase board.

Recovered paper
Waste and scraps of paper or paperboard that have been collected for re-use or trade. It includes paper and paperboard that has been used for its original purpose and residues from paper and paperboard production.

The major grades of used paper entering in the flow of recovered paper:

- **mixed grades**, all other types of recovered paper, including unsorted waste and scrap
- **corrugated, solid container and kraft sack waste (old and new)**, i.e. recovered paper containing mainly unbleached sulphate pulp
- **old and over-issue newspapers, magazines, etc.**, i.e. waste paper containing mainly mechanical pulp
- **wood-free printing and writing papers and other high-grade qualities**, i.e. recovered paper containing mainly bleached chemical pulp

The definitions of paper and paperboard produced from different grades of used paper follow the logic of matrix in the Table 1.

Table 1. Recovered paper utilization matrix with FAOSTAT codes

Major grades of paper and paperboard	Recovered paper used domestically for paper and paperboard making (all figures in 1000 tonnes), of which:				
	Total use of recovered paper	Mixed grades	Corrugated, solid container and kraft sack waste (old and new)	Old and over-issue newspapers, magazines, etc.	Wood-free printing and writing papers and other high-grade qualities
Paper and paperboard	1876.01	1876.01.01	1876.01.02	1876.01.03	1876.01.04
Graphic papers	2042.01	2042.01.01	2042.01.02	2042.01.03	2042.01.04
Newsprint	1671.01	1671.01.01	1671.01.02	1671.01.03	1671.01.04
Printing and writing papers	1674.01	1674.01.01	1674.01.02	1674.01.03	1674.01.04.
Packaging paper and paperboard	2043.01	2043.01.01	2043.01.02	2043.01.03	2043.01.04
Case materials	1617.01	1617.01.01	1617.01.02	1617.01.03	1617.01.04
Cartonboard	1618.02	1618.02.01	1618.02.02	1618.02.03	1618.02.04
Other wrapping and packaging papers, n.e.s.	1622.01	1622.01.01	1622.01.02	1622.01.03	1622.01.04
Household and sanitary papers	1676.01	1676.01.01	1676.01.02	1676.01.03	1676.01.04
Other paper and paperboard, n.e.s.	1683.01	1683.01.01	1683.01.02	1683.01.03	1683.01.04

Table 2. Pulp and paper items composition

	Item name	FAOSTAT Code	Items composition
1	Wood pulp for paper and paperboard	1856	16850+1656
1.1	Mechanical, thermo-mechanical and semi-chemical wood pulp	16850	1685.01+1685.02+16550
1.11	Mechanical wood pulp	1685.01	1685.01.01+1685.01.02
1.111	Mechanical wood pulp, non-coniferous	1685.01.01	
1.112	Mechanical wood pulp, coniferous	1685.01.02	
1.12	Thermo-mechanical wood pulp	1685.02	1685.02.01+1685.02.02
1.121	Thermo-mechanical wood pulp, non-coniferous	1685.02.01	
1.122	Thermo-mechanical wood pulp, coniferous	1685.02.02	
1.13	Semi-chemical wood pulp	16550	1655.01+1655.02
1.131	Semi-chemical wood pulp, non-coniferous	1655.01	
1.132	Semi-chemical wood pulp, coniferous	1655.02	
1.2	Chemical wood pulp	1656	1686+1839
1.21	Chemical wood pulp, sulphite	1686	16660+16610
1.211	Chemical wood pulp, sulphite, unbleached	16600	1660.01+1660.02
1.2111	Chemical wood pulp, sulphite, unbleached, non-coniferous	1660.01	
1.2112	Chemical wood pulp, sulphite, unbleached, coniferous	1660.02	
1.212	Chemical wood pulp, sulphite, bleached	16610	1661.01+1661.02
1.2121	Chemical wood pulp, sulphite, bleached, non-coniferous	1661.01	
1.2122	Chemical wood pulp, sulphite, bleached, coniferous	1661.02	
1.22	Chemical wood pulp, sulphate	1839	1662+1663
1.221	Chemical wood pulp, sulphate, unbleached	1662	1662.01+1662.02
1.2211	Chemical wood pulp, sulphate, unbleached, non-coniferous	1662.01	
1.2212	Chemical wood pulp, sulphate, unbleached, coniferous	1662.02	
1.222	Chemical wood pulp, sulphate, bleached	1663	1663.01+1663.02
1.2221	Chemical wood pulp, sulphate, bleached, non-coniferous	1663.01	
1.2222	Chemical wood pulp, sulphate, bleached, coniferous	1663.02	
2	Pulp of other fibre for paper and paperboard	1857	1857.01+1857.02+1857.03+1857.04
2.1	Pulp of straw	1857.01	
2.2	Pulp of bagasse	1857.02	
2.3	Pulp of bamboo	1857.03	
2.4	Pulp of other fibre, not elsewhere specified	1857.04	
3	Dissolving pulp, wood and other raw materials	1858	1858.01+1858.02+1858.03
3.1	Dissolving wood pulp, non-coniferous	1858.01	
3.2	Dissolving wood pulp, coniferous	1858.02	
3.3	Dissolving pulp of fibre other than wood	1858.03	
4	Paper and paperboard	1876	2042+1675
4.1	Graphic papers	2042	1671+1674
4.11	Newsprint	1671	
4.12	Printing and writing papers	1674	1616+1869
4.121	Printing and writing papers, coated	1616	1616.01+1616.02
4.1211	Printing and writing papers, coated, wood containing	1616.01	
4.1212	Printing and writing papers, coated, woodfree	1616.02	
4.122	Printing and writing papers, uncoated	1869	1612+1615

4.1221	Printing and writing papers, uncoated, wood containing	1612	
4.1222	Printing and writing papers, uncoated, woodfree	1615	
4.2	Other paper and paperboard	1675	1676+2043+1683
4.21	Household and sanitary papers	1676	
4.22	Packaging paper and paperboard	2043	1842+1850+16210+1618+16220
4.221	Linerboard	1842	1842.01+1842.02
4.2211	Linerboard, kraft liner	1842.01	1842.01.01+1842.01.02
4.22111	Linerboard, kraft liner, unbleached	1842.01.01	
4.22112	Linerboard, kraft liner, bleached	1842.01.02	
4.2212	Other linerboard	1842.02	
4.222	Fluting medium	1850	1850.01+1850.02
4.2221	Semi-chemical fluting medium	1850.01	
4.2222	Other fluting medium	1850.02	
4.223	Kraft wrapping and packaging papers	16210	1621.01+1621.02
4.2231	Kraft wrapping and packaging papers, sack kraft	1621.01	
4.2232	Other kraft wrapping and packaging papers	1621.02	
4.224	Cartonboard	1618	1618.01+1618.02
4.2241	Pulp-based cartonboard	1618.01	1618.01.01+1618.01.02
4.22411	Bleached chemical pulp cartonboard	1618.01.01	
4.22412	Other pulp-based cartonboard	1618.01.02	
4.2242	Cartonboard produced from recovered paper	1618.02	
4.225	Other wrapping and packaging papers, not elsewhere specified	16220	1853+1854
4.2251	Other wrapping paper, not elsewhere specified	1853	
4.2252	Other packaging paper, not elsewhere specified	1854	
4.23	Other paper and paperboard, not elsewhere specified	1683	1855+1880
4.231	Other paper, not elsewhere specified	1855	
4.232	Other paperboard, not elsewhere specified	1880	