



Hemlock

ENVIRONMENTAL INTEGRITY

As part of Hemlock's ongoing commitment to sustainability, we are proud to provide you with this information about paper and the environment. We hope that it will help you to make informed decisions that will result in a product of exceptional quality with the least possible environmental impact.

We understand that the terms associated with the new wave of environmental papers can be overwhelming at times. We have put the following glossary together for you to use as a guide when making your paper choices. The following information was provided by Markets Initiative.

FORESTS & FIBRES

Ancient Forests

Ancient Forests refer to forest areas that are relatively undisturbed by human activity. They vary significantly in age and structure from forest type to forest type and one biogeoclimatic zone to another. Boreal forests, temperate or tropical rainforests may all be classified as ancient or old growth. The following features characterize ancient forests:

- not undergone any significant industrial activity
- naturally regenerated and dominated by a range of indigenous tree species
- tree size, age and spacing vary widely
- accumulations of dead standing trees (snags) and fallen trees are much more frequent than in younger forests
- trees are large for the species and site combination
- the canopy has many openings and the forest floor is lush with ferns, berry bushes, mosses, etc.
- multiple canopy layers
- support old-growth dependant species

Endangered Forests

Endangered Forests are so rare, threatened or ecologically vulnerable, and are of such global biological importance that any commercial use could irreparably damage their conservation value. There are four ecological categories of Endangered Forests:

- intact forest landscapes (Frontier Forests)
- restoration and remnant forest types
- exceptional biodiversity value (e.g. rare forest types, exhibiting high endemism or species richness)
- core habitat of focal conservation species

Ancient Forest Friendly Paper

Ancient Forest Friendly Paper is totally chlorine free or processed chlorine free and contains only the following fibres:

- post-consumer recycled fibre
- de-inked recycled fibre
- agricultural residue
- Forest Stewardship Council certified virgin fibre

Alternative/Agricultural Fibres

Refer to non-wood plants that are grown intentionally for paper and other products (e.g. hemp and kenaf).

Agricultural Waste/Residue

Refers to usable materials recovered primarily from annual crops as by-products of food and fibre production (e.g. flax and wheat).

Recovered Fibre

Refers to the universe of materials that count as both pre- and post-consumer recycled.

Virgin Fibre

Fibre that has not been previously used in a product. It can refer to fibre that originates from forests or agricultural sources. The vast majority of virgin forest fibre in Canada originates from endangered or ancient forests.

Forest Stewardship Council (FSC) Certification

The FSC is an international, non-profit organization founded in 1993 to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests. The goal is to improve forest conservation and reduce deforestation. Markets Initiative recognizes virgin pulp from FSC certified forests as a part of the environmental paper solution.

CHLORINE PROCESSES

Chlorine-Free Product

A chlorine-free product is one which has been produced without the use of chlorine compounds, including elemental chlorine gas, chlorine compounds and chlorine derivatives.

Processed Chlorine Free (PCF)

This is the preferred process producing a recycled paper in which the recycled content is unbleached or bleached without chlorine or chlorine derivatives. Any virgin portion of the paper must be TCF. PCF uses oxygen-based compounds instead of chlorine-based compounds in the bleaching process.

Totally Chlorine Free (TCF)

Virgin paper that is unbleached or is processed with a sequence that includes no chlorine or chlorine derivatives.

Elemental Chlorine Free (ECF)

Virgin paper processed without elemental chlorine but with a chlorine derivative such as chlorine dioxide. Although considerably less harmful than using chlorine, ECF is still considerably worse than TCF.

PAPER CONTENT

De-Inking

De-inking is the process by which ink is lifted off used paper that is then broken back down into fibres to be recycled into new paper.

Recycled Paper

There is no universally accepted legal requirement for the designation "recycled paper." Paper labeled as recycled can be a mix of virgin, pre-consumer and post-consumer fibres. Ask for clarification on the post-consumer content of recycled paper.

Post-Consumer Content

A product that, having completed its intended life cycle as a consumer item, has been separated or diverted from the solid waste stream for recycling. Products, scraps and materials still in production or value-added processes (like printing) do not qualify as post-consumer waste. For example, paper recovered from curbside collections is considered to be post-consumer, while paper scraps from a printshop are not. Other examples of post-consumer waste include newspapers, magazines and product packaging discarded from people's homes, office waste paper and cardboard packaging from delivered boxes.

Pre-Consumer or Post-Commercial Content

This refers to paper waste generated through manufacturing, converting, printing and other value-adding processes. While the paper itself is a complete product, it does not reach the final consumer. Examples include scraps from converting envelopes, trim waste and pull sheets.

Tree-Free Paper

Tree-free paper is made from agricultural waste/residue fibre or agricultural fibres.



MARKETS INITIATIVE

Markets Initiative is a Vancouver-based non-profit organization that works with Canadian companies to conserve ancient and endangered forests by shifting their demand and supply of paper products to environmentally sound options. For more information, please visit www.marketsinitiative.org.

Hemlock is actively working with Markets Initiative to help develop ancient forest friendly papers. Hemlock was the first printer in North America to sign an Ancient Forest Friendly policy and is committed to phasing out the use of any papers from old-growth forests by 2008.

