



DOWN AND FEATHER DEFINITIONS

The definitions of down and feather components differ from country to country. The following are two of the most widely accepted definitions:

The International Down and Feather Bureau (IDFB) establishes testing methods and other standards for the international community. All national and regional down and feather associations belong to IDFB. Most countries use the IDFB standards as the base for their own standards. In the case where IDFB does not have a definition, we have used the USA/ABFLO definition. (ABFLO is the International Association of Bedding and Furniture Law Officials.)

The European EN 1885 is the most recent effort by the European Union to standardize definitions for all countries of Europe:

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
After Shaft		(2.10 After Shaft) Feather (2.3.1) that branches off from the same quill point (2.9) of a normal feather and that is smaller than this one; it is typical of chickens and turkeys.
Barb, Down	Soft filamentous structure emanating from the quill point of the down.	(2.20 Down barb and plumule barb) Filamentary structure furnished with barbules (2.21) with nodes (2.25), but generally without prongs (2.22), thorns (2.23) and clamp teeth (2.24). The down barb emanates directly from the down core (2.13), while the plumule barb emanates from the quill shaft (2.8) of the plumule.
Barb, Feather	A primary branch emanating from the quill shaft of feathers, plus its barbules, being coarse in structure and appearance when compared with down barbs.	(2.19 Feather Barb) Main structure of the vane (2.11), directly growing from the quill shaft (2.8) and bearing barbules (2.21), with prongs (2.22), thorns (2.23) and clamp teeth (2.24). It has normally no nodes (2.25).
Barbule	A branch of the barb plus its nodes and/or prong.	(2.21 Barbule) Branch of the barb (2.19) with either its nodes (2.25) or prongs (2.22).
Clamp Tooth		(2.24 Clamp Tooth) Little prominence of lower barbules (2.21).

MAIN OFFICE

1455 South 1100 East
Salt Lake City, UT 84105 USA
Tel: +1 801 467 7611
Fax: +1 801 467 7711
email: info@idfl.com

IDFL EUROPE

Bahnhofstr. 42
CH-8500 Frauenfeld SWITZERLAND
Tel: +41 52 765 1574
Fax: +41 52 770 1574
email: suomax@idfl.com

IDFL CHINA

Tonghui Mid-Road 118, Xiaoshan
Hangzhou, Zhejiang 311208 CHINA
Tel: +86 571 8389 9215
Fax: +86 571 8389 9179
email: china@idfl.com

Member ASTM

Member IABFLO

Advisor/Member IDFB

Member CFDA (China)

Cosultant ADFS/HFPA (USA)

Associate Member EDFA (IDFL Europe)

Visit us at:

WWW.IDFL.COM

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Down	The plumage forming the undercoating of waterfowl, consisting of tufts of light, fluffy filaments (e.g. barbs) growing from one quill point, but without any quill shaft.	(2.12 Down) Plumage forming the undercoating of waterfowl, consisting of clusters of light, fluffy filaments (e.g. down and plumule barbs 2.20) growing from one scanty sketched down core (2.13) but without any quill shaft (2.8) or vane (2.11). NOTE: Conventionally at least two barbs connected at one point are considered as down.
Down Cluster	Down Cluster is the group of components: down, nestling down and plumule. (Down fibre and other components are specifically excluded.)	
Down Core		(2.13 Down Core) Centre growth point in a cluster of down.
Down, Nestling	A down not fully developed with a sheath and with soft barbs emanating from the sheath. The barbs of nestling down are soft and fluffy, making it a three-dimensional structure.	(2.14 Nestling Down) Down (2.12) not fully developed, with barbules (2.21) emanating from the basal end covered with a sheath (2.15) and without any quill (2.7).
Down of Eiderduck		(3.1.3 Down of Eiderduck) Down (2.12) picked from eiderducks' nests (<i>Anas somateria mollissima</i>).
Feathers	The plumage or outgrowth forming the contour and external covering of fowl consisting of quills and barbs. Includes only material which has not been processed in any manner other than by washing, dusting, and sterilizing.	(2.3.1 Feather (general)) Plumage (2.1) without quill feathers (2.2). (2.3.2 Feather (specific)) Horny integument of fowls. It has a shorter and softer vane (2.11) than quill feather (2.2) and, unlike plumules (2.16), a well developed quill (2.7).

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Feathers, Crushed/ Chopped/ Broken	A feather is broken when more than 40% of the shaft is missing. A bare shaft is also classified as a broken feather. A feather whose shaft has been “fractured” in the middle, is also classified as a broken feather. Schleiss or stripped feather pieces are classified as broken feathers.	(4.4 Broken Feather) Feather (2.3.1) whose quill (2.7) is broken. NOTE: A feather is broken when more than 40% of the quill is missing. A bare, but complete quill is classified as a broken feather. A feather whose quill has been “fractured not separated” or “snapped” is also classified as a broken feather.
Feathers, Chicken		(3.21 Chicken Feather) Feather derived from the plucking of chickens (<i>Gallus Gallus</i>); also feather of all kinds of landfowls (3.2).
Feathers, Damaged	A feather is damaged when more than 25% of the feather surface is missing but at least 60% of the shaft remains.	(4.6 Damaged Feather) Feather (2.3.1) with unbroken shaft which while retaining its original form is exhibiting damage to the vane (2.11) due to chemical and/or biological causes or due to missing barbs (2.19) or missing part of the vane and/or upper quill due to mechanical causes. NOTE: A feather is damaged when more than 25% of the feather surface is missing.
Feathers, Duck		(3.1.2 Duck Feather) Feather (2.3.1) derived from the plucking of ducks (<i>Anas Anas</i>).
Feathers, Finished		(4.2 Finished Feather) Feather (2.3.1) which has been passed through all the working processes, including washing, drying and all hygienic treatments.
Feather, Flat		(2.6 Flat Feather) Feather (2.3.1) with straight vane (2.11).
Feather, Goose		(3.1.1 Goose Feather) Feather (2.3.1) derived from the plucking of geese (<i>Anser Anser</i>).
Feathers, Landfowl	Feathers derived from chickens, turkeys or other landfowl.	(3.2 Landfowl Feather) Feather (2.3.1) derived from the plucking of landfowl (gallinaceans), includes chicken feathers (3.2.1) and turkey (3.2.2).

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Feather, Milled		(4.3 Milled Feather) New feather (4.2.1) which has been chopped or curled by means of a mechanical process.
Feather, Neck		(2.4 Neck Feather) Smallest feathers from the neck and head area, some with very sharp quill points.
Nestling Feathers	Immature feathers in which the barbs are held together and covered by a sheath. Nestling feathers are two-dimensional with stiff barbs and have a brushy appearance. Nestling feathers have no distinguishable quill.	(2.5 Nestling Feather (pin feather)) Feather (2.3.1) not fully developed, having no distinguishable quill (2.7) but with relatively short coarse barbs (2.19).
Feather, New		(4.2.1 New Feather) Feather (2.3.1) not previously used after plucking as filling material.
Feathers, Quill	Feathers which are over 100 mm in length or which have a quill point exceeding 9.5 mm in length.	(2.2 Quill Feather) Stiff, course, wing and tail plumage. It has a longer and stiffer vane (2.11) than a feather (2.3.1).
Feathers, Raw		(4.1 Raw Feather) Feather (2.3.1) and/or down (2.12) obtained by plucking the animal, wet or dry; with or without dust, possibly disinfected or treated merely for preservation. Pretreated feather which has been rinsed, dried or sorted; feather which has been already used as filling material, not yet reprocessed.
Feathers, Reprocessed		(4.2.2 Reprocessed Feather) Feather (2.3.1) which has been previously used as filling material and again subjected to treatment according to 4.2.

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Feathers, Small	Whole waterfowl feathers, other than quill feathers, crushed or damaged feathers, which are less than two and one-half inches in length.	
Feathers, Stripped		(4.5 Stripped Feather) Group of barbs (2.19) of a feather (2.3.1) stripped from the quill shaft (2.8) but not separated into feather fibres (2.17).
Feather, Turkey		(3.2.2 Turkey Feather) Feather (2.3.1) derived from the plucking of turkeys (Melagris Gallopavo).
Feathers, Waterfowl	Feathers from ducks or geese, or both.	(3.1 Waterfowl Feather) Feather (2.3.1) derived from the plucking of waterfowl, such as ducks and geese, and/or picked in eiderducks' nests.
Fibre, Down	Detached barbs from down plumules and detached barbs from the basal ends of waterfowl feather quill shafts that are indistinguishable from the barbs of down.	(2.18 Down fibre) Down barb (2.20) or plumule barb (2.20) detached respectively from the down core (2.13) or the quill shaft (2.8).
Fibre, Feather	Detached barbs of feathers which are not joined or attached to each other.	(2.17 Feather fibre) Feather barb (2.19) detached from the quill shaft (2.8).
Filling Material	The contents of an industry product containing feathers or down of any kind or type, with or without other natural or synthetic materials.	

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Industry Product	Products such as furniture, pillows, comforters, sleeping bags, and wearing apparel which are wholly or partially filled with feathers or down. Also, bulk stocks of processed feathers or down intended for use in the manufacture of such products.	
Internode	The portion of the barbule between the distal end of one node and the basal end of another.	(2.26 Internode) Distance between the basis of two consecutive nodes (2.25).
Node	A protuberance or swelling appearance on barbules.	(2.25 Node) Protuberance or swelling appearing on barbules (2.21).
Oxygen Number	A measure of the degree of cleanliness of plumage; the amount of oxidizable water soluble and fine suspended material present in a water extract. The oxygen number of plumage is stated as grams of oxygen per 100 kg of sample.	
Plumage	The outgrowth of fowl, consisting of feathers and down (waterfowl) or feathers only (landfowl).	(2.1 Plumage) All elements (quill feathers, feathers, down, plumule) of a plumage from different kinds of waterfowl and landfowl.
Plumules	A plumule is a feather-like structure with characteristics of down. Plumules are three-dimensional with a soft, underdeveloped quill. The majority of barbs are down fibers and the plumule tip is open, transparent and soft.	(2.16 Plumule) Downy three-dimensional waterfowl plumage produced in the early weeks of life with underdeveloped soft and flaccid quill (2.7) and feather barbs (2.19) indistinguishable from the barbs of down. NOTE: It is conventionally recorded as down.

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Percentage	The percentage composition of any mixture of feather or down filling materials, as specified in material specifications.	
Prong	Short spiny outgrowths emanating from barbules.	(2.22 Prong) Short spiny outgrowths emanating from barbules (2.21).
Quill	The stem or central shaft of feathers.	(2.7 Quill) Axial part of quill feather (2.2) and feathers (2.3.1). It is formed by the quill point (2.9) and the quill shaft (2.8).
Quill Point	The section of quill extending beyond the section of barb attachment.	(2.9 Quill Point) Part of the quill (2.7) inserted in the skin and partially protruding from it.
Quill Shaft	The section of quill from which the barbs emanate.	(2.8 Quill shaft) Part of the quill (2.7) which carries the vane (2.11).
Residue	Quill pith, quill fragments, trash, or foreign matter.	(4.7 Residual Matter) Quill pith, quill fragments, trash or any other foreign matter.
Secondhand Filling Material	An industry product which contains any filling material which has previously been used. Such a product should not be offered for sale unless a clear and conspicuous disclosure of that fact is made on the label thereof and in all advertising and invoices relating to such product.	
Sheath	A covering at the quill point end of nestling feathers or nestling down which holds the barbs together.	(2.15 Sheath) Covering at the basal end of nestling down (2.14) which holds the barbules (2.21) together.
Thorn		(2.23 Thorn) Little prominence of lower barbules (2.21) having the same function as prongs (2.22).

Term	IDFB / USA ABFLO Definition	European EN 1885 Definition
Vane	The section of a feather that consists of a solid, stiff collection of barbs, as distinguished from the section near the quill point that has soft, fluffy barbs.	(2.11 Vane) The whole of feather barbs (2.19) intimately connected among them by means of barbules (2.21); it branches off from the quill shaft (2.8). NOTE: Present in quill feather (2.2) and feather (2.3.1) but absent in down. (2.12)

MAIN OFFICE

1455 South 1100 East
Salt Lake City, UT 84105 **USA**
Tel: +1 801 467 7611
Fax: +1 801 467 7711
email: info@idfl.com

IDFL EUROPE

Bahnhofstr. 42
CH-8500 Frauenfeld **SWITZERLAND**
Tel: +41 52 765 1574
Fax: +41 52 770 1574
email: suomax@idfl.com

IDFL CHINA

Tonghui Mid-Road 118, Xiaoshan
Hangzhou, Zhejiang 311208 **CHINA**
Tel: +86 571 8389 9215
Fax: +86 571 8389 9179
email: china@idfl.com

Member ASTM
Member IABFLO
Advisor/Member IDFB
Member CFDIA (China)
Cosultant ADFS/HFPA (USA)
Associate Member EDFA (IDFL Europe)

Visit us at:
WWW.IDFL.COM