Features of feather and down

FLUFFINESS AND LIGHTNESS
"Light as a feather". This is a unique property even taken as a benchmark. A down flake weighs from 2 to 3 milligrams, so it takes 500 to 300 flakes to have 1 gram of product.

COMFORT HYGROSCOPICITY
The capacity to absorb moisture is a very important physiological factor as it allows it to wick away from the body.

INSULATION
Given its morphological characteristics, the filling can retain great volumes of air inside.

HYPOALLERGENICITY
Correctly treated feather is allergen-free. Experimental tests carried out by Italian and foreign research institutes have documented that possible allergic reactions are closely linked to the presence of dust in the domestic environment which can be a receptacle for the nesting of mites, the real culprits of allergies. See link to Nomite: https://edfa.eu/brands/nomite-the-brand/

COMPRESSIBILITY AND ELASTIC RECOVERY
Feathers and down are highly compressible given the great amount of air it can retain and its capacity to be restored to its original shape and volume.

BIODEGRADABILITY
Due to their 100% natural origin, feathers and down are completely biodegradable. At the end of their life cycle, they are transformed into nitrogenous fertiliser that can be used in agriculture and gardening, thus reintegrating into the biological life cycle.

FLAME RETARD
Feather (and down), like wool, both made up of keratin, is a natural FLAME RETARDANT, which means that it is flame retardant. In fact the feather:

• has a high ignition temperature
• has the lowest flammability index
• does not spread the flame
• has the lowest smoke development index
• does not melt
Glossary

The sectors manufacturing natural filling material (feather and down) witnessed a remarkable growth in recent years, hence the need to provide processing industries – from washers to sorters, and manufacturers as well as end users – with correct and clear information. A set of terms and definitions is the first step to achieve clarity and help the consumers understand several features, above all the qualitative and quantitative composition of manufactured products. Here are some of the most widely used terms (for further information, please refer to UNI EN 1885).

QUILL FEATHER: stiff, coarse, wing and tail plumage. It has a longer and stiffer vane than a feather.

FEATHER: (general) plumage without quill feathers.

FEATHER: (specific) horny integument of fowls. It has a shorter and softer vane than quill feather and, unlike plumules, a well-developed quill.

DOWN: plumage forming the undercoating of waterfowl, consisting of clusters of light, fluffy filaments growing from one scantily sketched down core but without any quill shaft or vane.

NOTE: conventionally at least two barbs connected at one point are considered as down.

VANE: the whole of feather barbs intimately connected among them by means of barbules; it branches off from the quill shaft.

FEATHER BARB: main structure of the vane, directly growing from the quill shaft.

DOWN BARB: filamentary structure, which emanates directly from the down core.

WATERFOWL FEATHER: feather derived from the plucking of waterfowl, such as ducks and geese, and/or picked from eiderducks’ nests.

LANDFOWL FEATHER: feather derived from the plucking of landfowl (gallinaceans); it includes chicken and turkey feather.

CHICKEN FEATHER: feather derived from the plucking of chickens (Gallus Gallus); also feather of all kind of landfowls.

FINISHED FEATHER: feather, which has been passed through all the working processes, including washing, drying and all hygienic treatments.

NEW FEATHER: feather not previously used after plucking as filling material.

REPROCESSED FEATHER: feather, which has been previously used as filling material and again subjected to hygienic treatment.

As to down and feather filled products two further definitions are important:

CUSHION: a bag made of cloth or leather which is filled with feather and is used for sitting, or as ornament on beds, sofas and the like.

PILLOW: a cloth bag filled with feather covered by a pillowcase, used for supporting a person’s head when they are in bed.