



## CLEANLINESS TESTING FOR DOWN & FEATHER PRODUCTS

### Down and Feathers are Clean and Safe

For over 40 years governments around the world have required very stringent cleaning and sterilization processes to insure that down and feathers are safe and clean.

First, down and feathers are pre-washed and de-dusted to remove dirt from bulk down. This is often done on the site of the food-packing plants that process duck and goose meat.

Next, down and feathers are transported to a factory that specializes in cleaning down and feathers. Down is washed and rinsed in soap to remove all foreign material from the surface of down and feathers.

The last and most important step is the sterilization of down and feathers. A small amount of material is placed in a airtight bin. High-pressure steam is injected into the chamber for 30 minutes. The steam has a temperature of 130° C (250°F)

This sterilization kills every possible bacteria and virus.

IDFL regularly inspects down processing plants to insure that the cleaning and sterilization process is proper. Such inspection is required by several governments before issuing permits.

### How Can a Buyer Make Sure that Down is Clean?

Several tests help determine the cleanliness of bulk down as well as finished products:

#### **Oxygen Number:**

This test determines the amount of foreign organic matter on the surface of the down and feathers. To qualify as "clean" the oxygen number should be less than 10. (A "hypoallergenic" or super-clean product must have an oxygen number less than 5. Some countries and some buyers also have stricter requirements.)

#### – **Turbidity:**

This test determines the amount of dust in down and feathers. Clean products must have a turbidity greater than 300 mm. (Super-clean products require at least 500mm)

#### – **Special Bioburden Tests:**

Special microbiological tests can be done to determine levels of bacteria or other harmful agents.

#### – **Fat & Oil Tests:**

Some oil is necessary for the proper performance of down and feathers. Excess oil can create odor or other cleanliness problems.

IDFL offers testing to solve special problems in down and feathers.

– **Odor Evaluation.** IDFL can determine if odor is permanent or temporary. IDFL will check to see if source of odor is the fabric, the down and feathers or the packaging.

– **Dust Evaluation.** Determines the relative amount of dust in a product.

### IDFL & CLEANLINESS TESTING

- IDFL performs cleanliness tests on about 4,000 samples per year.
- IDFL inspects many down factories for certification of cleaning in Europe, Asia and North America.
- IDFL performs cleanliness for all standards in Europe, Asia and North America.
- For more information contact **IDFL Customer Service**

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