

# UNIQUE TEST FACILITIES FOR GOOSE DOWN FEATHER

# **FILL POWER OF GOOSE DOWN**



Standard

• IDFB testing regulations (Pt-10-B) Jun.-2013.

EN 12130

Scope

This standard prescribes the test method for determination of approximate insulation value of down feathers filling.

Principle

Fill power is the measurement of the height in mm of the volume occupied by a specific amount of downs in a cylinder of known diameter and compressed under a pre-set pressure at specific conditions. Fill volume is the volume occupied by a specified amount of down expressed in cm3/g or inch3/g.

Equipment:

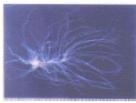
Braden Device consists of two parts-

- Measuring cylinder of 500mm height and 288mm diameter.
- Weight plate with a diameter of 284mm and load weight 94.25g
- Steam machine
- Hair dryer (Approx.1500 watt.)
- Fill Power conditioning box
- A wooden stick for loosening the down

## **CONTENT ANALYSIS OF PLUMAGE**









Standard

• IDFB testing regulations (Pt-03) Jun.-2013.

EN 12131

Scope

This standard prescribes the test method for determination

of composition of down feathers products.

Conditioning:

Keep the down and feather products for at minimum of

24 hrs. at(20  $\pm$  2)0C temperature and 65  $\pm$ 4% RH.

Equipment

Separating Cabinet

Base 450mm x 300mm

Front height 150mm

Back height 300mm

· Beakers & Weighing Bottles

Forceps and Brush

Micro-fiche

• Balance with capacity of 220g and accuracy to 0.1mg

• Mixing container 300mm x 300mm x 150mm

#### **OXYGEN NUMBER**





Standard

• IDFB testing regulations (Pt-07) Jun.-2013.

EN 1162

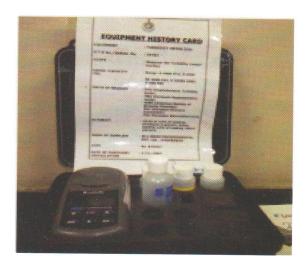
Scope

This standard prescribes method for determination of amount of foreign organic matter on the surface of the down feathers. To qualify as "clean" the oxygen number must be less than 10.

Equipment

- Weighing Balance of accuracy to 0.1 mg
- 2000 ml, round plastic jar with water tight lid for shaking.
- 2000 ml beaker
- 250 ml beaker
- Horizontal shaking machine with 150 shakes/ min and shaking width of 30 – 40 mm.
- Glass filter (pore size p-160)
- Full pipette 100ml class A
- Graduated pipette 5ml
- Micro burette with division of 0.02ml
- Stop Watch
- Magnetic stirrer

#### **TURBIDITY TEST**



Standard

• IDFB testing regulations (Pt-11A) Jun.-2013.

• EN 1164

Scope

This standard prescribes method for determination of amount of dust in down feathers products. The turbidity of an aqueous extract is an indicator for the presence of both organic and inorganic material on the surface of down feather.

# Equipment

- Balance accuracy to 0.1 mg
- 2000 ml round plastic jar with water tight lid for shaking.
- 2000 ml glass/ plastic beaker
- 250 ml glass beaker
- Horizontal shaking machine with 150 shakes / min and shaking width of 30–40 mm.
- Glass filter (pore size p-160)
- Stop Watch
- La Motte NTU Meter 2020i, DTD No.25467
- Range 0-4000NTU

# pH VALUE OF DOWN FEATHER



Standard

• IDFB testing regulations (Pt-06) Dec. 2005.

• EN 1413

Scope

This standard prescribes the method for determination of the pH Value of down feather products

Equipment

• Weighing Balance of accuracy to at least 10 mg

Scissors

• Potentiometric pH apparatus

• Glass stoppered 250ml Erlenmeyer Flask

100ml beaker

Glass rod flattened at the end

Postal address	E-mail Address	Landline No.
GOI, MoD (DGQA), 'G' Block DHQ PO New Delhi-110011	stores- dgqa@nic.in	011-23011422
Postal address	E-mail Address	Landline No.
CQA(GS), GOI, MoD (DGQA), Post Box No. 127 Kanpur- 208001	cqagsknp- dgqa@nic.in	0512- 2324748
CQA(T&C), GOI, MoD (DGQA), Post Box No. 294 Kanpur- 208001	cqatc- dgqa@nic.in	0512- 2324529
CQA(M), GOI, MoD (DGQA), Post Box No. 229 Kanpur- 208001	cqamknp- dgqa@nic.in	0512- 2324436
CQA(PP), GOI, MoD (DGQA), Post Box No. 372 Kanpur- 208001	cqappknp- dgqa@nic.in	0512- 2324830
		v

Postal address	E-mail Address	Landline No.	
Senior Quality Assurance Establishment (GS) GOI, MoD (DGQA) Military Road, Anand Parbat New Delhi- 10005	sqaegsdelhi- dgqa@nic.in	011- 25721502	
Senior Quality Assurance Establishment (GS) GOI, MoD (DGQA), DGQA Complex Pazhavanthangal(PO) Chennai-600 114	sqaegschn- dgqa@nic.in	044- 22340435	
Senior Quality Assurance Establishment (GS) GOI, MoD (DGQA) Ministry of Defence(DGQA) Hastings PO Kolkata- 700022	sqaegskol- dgqa@nic.in	033- 22230862	
Senior Quality Assurance Establishment (GS) GOI, MoD (DGQA) DGQA Complex, LBS Marg Vikhroli (w), Mumbai- 400083	sqaegsmum- dgqa@nic.in	022- 25784610	
Senior Quality Assurance Establishment (GS) GOI, MoD (DGQA) DGQA Complex, Kanpur Cantt Kanpur- 208004	sqaegsknp- dgqa@nic.in	0512- 2321876	
Senior Quality Assurance Establishment (GS) GOI, MoD (DGQA) Post Box No. 21 Shahjahanpur- 242001	sqaegs- dgqa@nic.in	05842- 220054	