HYDROPHOBIC SHAKE

METHOD NUMBERS: IDFB 18-A



Shake Machine

Sample Comparison

WHAT IS IT?

The Hydrophobic Shake Test is a water repellency test that measures the performance of a DWR treatment for down and feathers.

HOW IS IT DONE?

A set amount of the sample to be tested is placed in a glass jar with deionized water. The sample is then agitated in a shake machine until the sample absorbs water and completely sinks. A reported value corresponds to the level of down in the water. The total shake time is reported when the sample completely sinks in the water.

This test can be used to compare untreated and treated samples or verify that a DWR treatment was applied properly on the sample.

WHAT DO THE NUMBERS MEAN?

The reported values of 1 through 5 correspond to the level of the down in water after shaking for a specific period of time. A 5 indicates that the sample remained above the water without sinking, and a 1 means that the sample completely sank in water. The test stops once the sample reaches the rating of 1.

The reported shake times are in minutes. The shake times depend on the water repellent properties of the sample.

WHY DO IT?

It is important to distinguish water repellent properties and performance of varying DWR treatments.

This test is also performed to verify successful application of a DWR treatment for down and feathers.

Testing, Inspection and Research Excellence