

SPRAY TEST (Surface Wetting Test)

The "Spray Test" is used for the **water repellency tests**, by spraying method on fabrics, leathers or other materials.



This instrument allows the operator to do water repellency tests to determine the behaviour of a fabric or leather to absorb water that get in contact with the same, in form of rain.

The exact definition for the test method is "**Surface Wetting Spray Tester**".

The Spray test is supplied with:

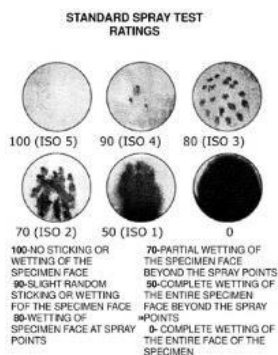
- metal sprayer nozzles with 19 holes having the same diameter;
- laboratory extractable funnel;
- graduated plastic becher;
- test tube holder consisting of two rings where the tube is fixed;
- circular specimen holder placed at an angle of 45°;
- laboratory tray.

The water repellency test is performed as follows: the sample of fabric or leather is fixed in the frame, so that it is not bent, and then pour 250 mL of water at $20 \pm ^\circ\text{C}$ in the funnel; so you will have a splash in the average length of 25-30 seconds. The water flows on the sample inclined at 45°. It then rotates the frame 180° and the test repeated.

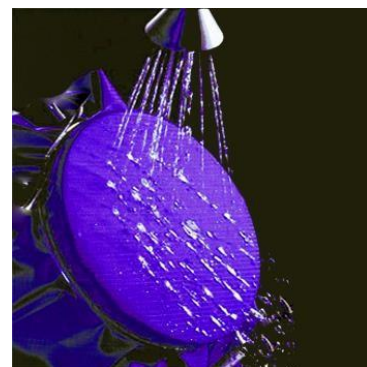
The test determines the wettability index by comparison between the appearance of the test tube and that of the descriptive and photographic samples provided by the reference standard.

Visually the wettability index is evaluated according to descriptive (ISO) or photographic scales (AATCC).

The ISO index ranges from 1 (wetting of the entire surface) to 5 (dry surface).



<i>Index EN ISO</i>	<i>Index AATCC</i>
ISO1	AATCC1
ISO2	AATCC2
ISO3	AATCC3
ISO4	AATCC4
ISO5	AATCC5



Standard Methods:

- ISO 4920
- UNI EN 24920 Resistance to surface wetting of fabrics or leather
- BS 3702
- AATCC 22 Water Repellency: Spray Test
- M&S P23
- NEXT 23
- UNI 5120

This method does not provide information on the resistance to rain penetration. To perform this test, the *Water Column Test* is used.

