

TEST METHOD FOR RESISTANCE TO PERSPIRATION

Application

This method is used to determine the resistance of all non-metallic materials. This method was originally released as JNS 30.14.20.

Apparatus Required

Analytical Balance - Precision +/- 0.1 g

One Liter Bottle

Solution Beakers

Mechanical Convection Oven – Capable of maintaining a temperature of 70 +/- 1 °C

Materials Required

Sodium Chloride – reagent grade

Lactic Acid – reagent grade 87%

Disodium hydrogen orthophosphate, anhydrous – reagent grade

Ammonium Carbonate – reagent grade

Distilled or Deionized Water – 20 micromhos/cm at 25 °C maximum conductivity (ASTM D 1125)

Date	Action	Revisions
2002 03 15	Activated	M. Garcia-Santamaria, L. Soreide

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Solution Required

Neutral Perspiration Solution

Distilled Water

Acid Perspiration Solution

Sodium Chloride	10 g
Lactic Acid	1 g
Disodium hydrogen orthophosphate, anhydrous	1 g
Water to	1 liter

Alkaline Perspiration Solution

Sodium Chloride	10 g
Ammonium carbonate	4 g
Disodium hydrogen orthophosphate, anhydrous	1 g
Water to	1 liter

Sodium Chloride Solution

Sodium Chloride	30 g
Water to	1 liter

Conditioning and Test Conditions

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23+/-2 °C and 50 +/- 5% relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

Procedure

1. Cut four 100 x 50 +/- 2 mm specimens from adjacent locations on the sample.
2. Immerse one specimen in each of the test solutions for 24 hours at 70 +/- 1 °C.
3. Remove each specimen. Do not dry or rinse. Let the samples air dry.