Chemical Penetration Resistance



Permeation vs. Penetration

- Permeation resistance testing measures the passage of chemicals (liquids or gases) through a material at a molecular level and requires sensitive analytical equipment to detect chemical breakthrough. It is intended for use with vapor-protective, gas-tight, EPA level A garments. The primary purpose is to isolate the wearer from a surrounding hazardous chemical environment.
- Penetration resistance testing evaluates if liquids physically penetrate materials using visual observation for detection. It is intended for use with liquid-splash, liquid-tight, EPA level B or C garments. The primary purpose is to keep liquids from contacting the wearer's skin.

ASTM F903 Test Method

- 5 minutes at ambient pressure
- 1 minute at 2 psig
- 54 minutes at ambient pressure
- Test yields a pass or fail result



Protective Outerwear Solutions