Components/Chemical | R&D,Testing/Manufacturing

Volume Resistivity Measurement of Plastic Materials

Measure the volume resistivity of plastic materials.

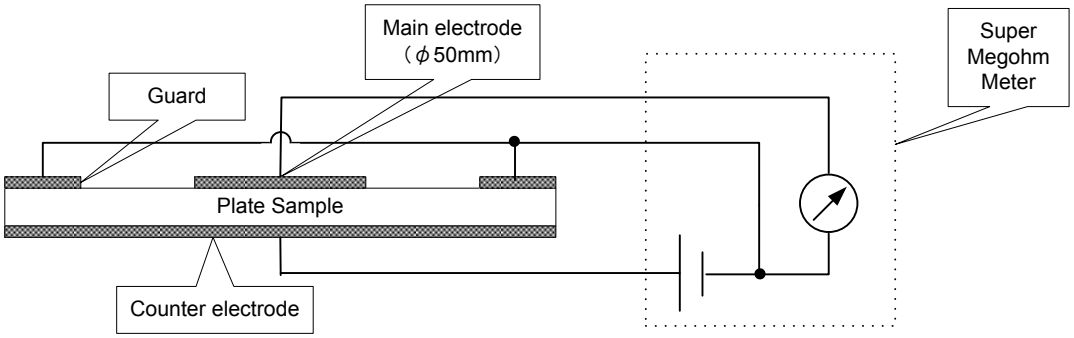
■Highlights

Volume resistivity of plastic materials can be measured using the SM-8220 Ultra Megohm Meter (SM-8213, SM-8215, and SM-8216) and the SME-8310 Plate Sample Electrode.
Volume resistivity can be easily calculated from the resistance readings and the sample thickness as the shape of the plate sample electrode conforms with the "JIS K-6911-1955 General test method of heat-hardening plastic materials."

※ Volume resistivity is equal to the volume resistivity between two electrodes that form two opposing surfaces of a cube with sides of 1 cm each.

SME-8310 PLATE SAMPLE ELECTRODE

SM-8220 SUPER MEGOHM METER



- Set the selector switch of the SME-8310 Plate Sample Electrode to volume resistance measurement.
- Set the plate sample in the electrode.
- Connect the connection cable and safety interlock connection cable to the main body.
- Measure surface resistance using the one-minute value method (read the resistance value one minute after voltage is applied) considering the dielectric absorption effect.
- Volume resistivity (Ωcm) can be calculated using the formula: Volume resistivity = SME-8310 electrode constant (19.6) / Plate sample thickness (cm) x Measured value.
- Select the best megohmmeter model depending on the resistance value and applied voltage of the test sample.
- For details on the electrode shape and test sample shape, refer to JIS K-6911-1995.

Products used

・SUPER MEGOHM METER	SM-8220
・PLATE SAMPLE ELECTRODE	SME-8310

K0017-E00
September 2009