

KES

Testing Methods for Melt Viscosity of Hot-Melt Adhesives

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1. Scope of Application

This standard shall apply to the testing methods for melt viscosity of hot-melt adhesives (Hereinafter referred to as adhesives).

2. Meaning of Terminology

The meaning used for this standard should follow KS M 3000 (Plastics terminology).

Hot melt adhesives: coat on the object as a melt phase and solidify by cooling. Then, form the joint as a solid phase. This is heat plasticity adhesive.

3. Control of Specimen State, Laboratory's Temperature and Humidity

The state of specimens are controlled at the temperature of $23 \pm 5^\circ\text{C}$ and the relative humidity of 50^{+20}_{-10} % for 12 hours. The test is performed indoors with the same temperature and humidity.

4. Test Equipment and Implement

The test equipment and implement are as follows

(1) Viscosity meter

By spring scale, the viscosity meter measured the viscosity torque, which is obtained by rotating the rotor of motor in the melt specimen.

(2) Specimen receptacle

The specimen receptacle is circular. When the amount of specimen is 10 ml, receptacle with diameter of 18 mm and depth of more than 95 mm is applied. When the amount of specimen is 200 ml (500 ml), 300 ml (500 ml) of is applied.

(3) Heating tub

The heating tub should be able to keep the test temperature of specimen uniform. The melt surface of heat-transferred object should be higher than the melt surface of