The Institute for Interconnecting and Packaging Electronic Circuits
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IPC-TM-650
TEST METHODS MANUAL

Number **2.4.34.4**	
Subject **Paste Flux Viscosity – T-Bar Spindle Method**	
Date **1/95**	Revision
Originating Task Group **Flux Specifications Task Group (5-24a)**	

1.0 Scope This test method is designed to measure the viscosity of paste flux.

2.0 Applicable Documents None

3.0 Test Specimen Enough paste flux to fill a container with a minimum diameter of 4 cm to a minimum depth of approximately 10 cm.

4.0 Apparatus and Reagents

4.1 Brookfield RVT viscometer or equivalent with helipath stand and a TC spindle.

4.2 Water bath capable of holding 25 +/-0.5°C.

4.3 Stopwatch

4.4 Spatula

5.0 Procedure

5.1 Test

5.1.1 Place container of paste flux in water bath at 25+/-0.5°C.

5.1.2 When medium has attained thermal equilibrium, place container under spindle so that it is at center of surface.

5.1.3 Start the Brookfield at 5 revolutions per minute and start the Helipath stand on descend.

5.1.4 Two minutes after the spindle has cut into the top surface of the medium, record the value. Check that spindle is not touching bottom of container.

5.1.5 Remove spindle from the paste flux. Using spatula, stir the flux vigorously for 15 to 20 seconds and remeasure viscosity.

5.2 Expression of Results The viscosities are calculated from the values recorded after 2 minutes of medium penetration. Both stirred and unstirred results should be quoted.

6.0 Notes

6.1 Safety Observe all appropriate precautions on MSDS for chemicals involved in this test method.