

EDS

Engineering,
GM DAEWOO Auto & Technology
Standards

TEST METHOD FOR DETERMINING THE METLING RANGE OF PLASTIC MATERIALS

EDS-T-7505

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VERSION: 3

1. PURPOSE

The purpose of this standard is to determine the melting range of plastic films, molded parts and the coatings on leather cloths etc.

2. SCOPE

This standard shall specify the method for determining the melting range of the plastic materials. The melting range is indicated by the "variance" of melting point determinations carried out on several representative test pieces.

3. TEST PIECES

3.1. Size of test pieces: The test pieces of $(70 \pm 2)\text{mm} \times (5 \pm 0.5)\text{mm} \times \text{thickness}$ shall be taken from various areas of available material but no closer than 100mm to an edge. Test pieces shall, wherever possible, be taken along a warp thread and along a weft thread or in longitudinal and transverse directions. For test samples in the form of strips, or narrow mouldings of width less than 10mm, the test pieces shall be taken in the longitudinal direction only.

3.2. Number of test pieces

3.2.1. For initial sample approval and arbitration purposes : at least 3

3.2.2. For routine quality control : at least 3

3.3. Sample of components or materials released to this specification shall be tested for conformity with the requirements of this specification and approval by **GMDAT** TECHNICAL CENTER prior to commencement of delivery of bulk supplies.

4. CONDITIONING

For initial sample approval and arbitration purposes, conditioning shall be carried out according to EDS-T-7507.

5. APPARATUS

5.1. Heating Apparatus

A heating device, providing a differentially heated surface plate and temperature scale fitted with an adjustable pointer, capable of calibration, shall be used. A suitable apparatus is a Kofler heating device manufactured by Messer Reichert Vienna, and illustrated in Fig.1.

This apparatus consists of a rectangular surface plate (1) which is electrically heated at one end, providing a thermal gradient along the longitudinal direction.

Temperature is indicated on the scale (2) via a pointer (4) which is connected to a sliding guide block (3) through an adjustable slider (5).