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Fifth edition  
2013-11-15

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## Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)

*Plastiques — Matières thermoplastiques — Détermination de la  
température de ramollissement Vicat (VST)*



Reference number  
ISO 306:2013(E)

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Published in Switzerland

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

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The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

This fifth edition cancels and replaces the fourth edition (ISO 306:2004), which has been technically revised. The main changes are the following additions:

- new apparatus, namely heating equipment consisting of a fluidized bed;
- precision data based on round robin testing performed in 2009;
- comparison data for tests with liquid-filled and fluidized bed.

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## Introduction

This revision introduces heating equipment, consisting of a fluidized bed, as a new apparatus; this is as an alternative to liquid-filled heating baths and direct-contact heating units. Fluidized beds can reach higher temperatures than traditional liquid-filled heating baths; therefore, they represent a suitable way to measure the Vicat softening temperature (VST) of thermoplastic materials having improved thermo-mechanical properties.

It was also felt necessary to add

- precision data based on round robin testing performed in 2009, and
- comparison data for tests with liquid-filled and fluidized bed.