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**Test methods for electrical materials, printed boards and other interconnection structures and assemblies –
Part 5-301: General test methods for materials and assemblies – Soldering paste using fine solder particles**

**Méthodes d'essai pour les matériaux électriques, les cartes imprimées et autres structures d'interconnexion et ensembles –
Partie 5-301: Méthodes d'essai générales pour les matériaux et les assemblages – Pâte à braser à fines particules de brasage**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Powder particle size distribution measurement	7
4.1 General.....	7
4.2 Powder particle size distribution measurement – Scanning electron microscope	7
4.2.1 Object.....	7
4.2.2 Equipment/apparatus.....	7
4.2.3 Procedure.....	7
4.2.4 Evaluation	7
4.3 Powder particle size distribution measurement – Laser diffraction.....	7
4.3.1 Object.....	7
4.3.2 Equipment/apparatus.....	7
4.3.3 Procedure.....	7
4.3.4 Evaluation	8
4.4 Powder particle size distribution measurement – Digital microscope	8
4.4.1 Object.....	8
4.4.2 Equipment/apparatus.....	8
4.4.3 Procedure.....	8
4.4.4 Evaluation	8
5 Solder paste viscosity.....	8
5.1 Method A: Trace spiral pump method.....	8
5.1.1 Object.....	8
5.1.2 Equipment/apparatus.....	9
5.1.3 Procedure.....	9
5.1.4 Evaluation	10
5.2 Method B: Spiral pump method (IEC 61189-5-3, Test 5-3X06: Solder paste viscosity – Spiral pump method (applicable to 300 Pa·s).....	10
5.2.1 Object.....	10
5.2.2 Test specimen	10
5.2.3 Equipment/apparatus.....	10
5.2.4 Procedure.....	10
5.2.5 Evaluation	11
5.3 Additional information	11
6 Printability test.....	12
6.1 Object.....	12
6.2 Equipment/apparatus	12
6.3 Procedure	14
6.4 Evaluation.....	14
7 Slump test	15
7.1 Object.....	15
7.2 Equipment/apparatus	15
7.3 Procedure	15
7.4 Evaluation.....	16
8 Reflow test	16

8.1	Object.....	16
8.2	Equipment/apparatus	16
8.3	Procedure	16
8.4	Evaluation.....	17
9	High temperature observation test	18
9.1	Object.....	18
9.2	Equipment/apparatus	18
9.3	Procedure	20
9.4	Evaluation.....	21
Annex A (informative) Example of the test report on powder particle size distribution measurement.....		22
Annex B (informative) Example of the test report on viscosity characteristics.....		23
Annex C (informative) Example of the test report on printability test.....		24
C.1	Test report form	24
C.2	Test report entry example	25
Annex D (informative) Example of the test report on slump test		26
Annex E (informative) Example of the test report on reflow test		27
E.1	Test report form	27
E.2	Test report entry example	28
Annex F (informative) Example of the test report on high temperature observation test.....		29
F.1	Test report form	29
F.2	Melting property report form.....	30
F.3	Entry example for melting property.....	30
Annex G (informative) Example pictures of the printing and reflow test		31
G.1	Printing test	31
G.2	Reflow test.....	32
Figure 1 – Metal mask for printability test.....		13
Figure 2 – Test board with slits for splitting		14
Figure 3 – Temperature profile for slump test.....		16
Figure 4 – Temperature profile for reflow test.....		17
Figure 5 – Metal mask for high temperature observation test		19
Figure 6 – Example structure of high temperature observation apparatus		20
Table 1 – QC procedure for Trace spiral-type viscometer.....		9
Table 2 – QC procedure for spiral-type viscometer according to Test 5-3X06 in IEC 61189-5-3.....		11
Table 3 – Evaluation index for printability test.....		15
Table 4 – Evaluation index for reflow test.....		18

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**TEST METHODS FOR ELECTRICAL MATERIALS, PRINTED BOARDS AND
OTHER INTERCONNECTION STRUCTURES AND ASSEMBLIES –****Part 5-301: General test methods for materials and assemblies –
Soldering paste using fine solder particles**

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The text of this International Standard is based on the following documents:

Draft	Report on voting
91/1655/CDV	91/1698/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

A list of all parts in the IEC 61189 series, published under the general title *Test methods for electrical materials, printed boards and other interconnection structures and assemblies*, can be found on the IEC website.

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TEST METHODS FOR ELECTRICAL MATERIALS, PRINTED BOARDS AND OTHER INTERCONNECTION STRUCTURES AND ASSEMBLIES –

Part 5-301: General test methods for materials and assemblies – Soldering paste using fine solder particles

1 Scope

This part of IEC 61189 specifies methods for testing the characteristics of soldering paste using fine solder particles (hereinafter referred to as solder paste).

This document is applicable to the solder paste using fine solder particle such as type 6, type 7 specified in IEC 61190-1-2 or finer particle sizes.

This type of solder paste is used for connecting wiring and components in high-density printed circuit boards which are used in electronic or communication equipment and such, equipping fine wiring (e.g., minimum conductor widths and minimum conductor gaps of 60 µm or less).

Test methods for the characteristics of solder paste in this document are considering the effect of surface activation force due to the fine sized solder particles which could affect the test result by existing test methods.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61189-5-3:2015, *Test methods for electrical materials, printed boards and other interconnection structures and assemblies – Part 5-3: General test methods for materials and assemblies: Soldering paste for printed board assemblies*

IEC 61190-1-2:2014, *Attachment materials for electronic assembly – Part 1-2: Requirements for soldering pastes for high-quality interconnects in electronics assembly*

ISO 857-2, *Welding and allied processes – Vocabulary – Part 2: Soldering and brazing processes and related terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 857-2 and the following apply.

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