
Gel ink ball pens and refills —

Part 1: General use

Stylos à bille à encre gel et recharges —

Partie 1: Utilisation générale

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 27668-1:2016

<https://standards.iteh.ai/catalog/standards/iso/6e498d39-2f7e-49a9-98a1-a258c2bdad11/iso-27668-1-2016>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 27668-1:2016

<https://standards.iteh.ai/catalog/standards/iso/6c498d39-2f7e-49a9-98a1-a258c2bdad11/iso-27668-1-2016>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	4
4.1 Tip classification	4
4.2 Shapes and dimensions of refills	4
4.3 Performance	5
4.3.1 Writing performance	5
4.3.2 Strike through	5
4.3.3 Drying time	5
4.3.4 Reproducibility	5
4.3.5 Water resistance	5
4.3.6 Light resistance	5
4.3.7 Cap-off time	5
4.3.8 Shelf life	5
5 Test equipment and accessories	6
5.1 Write test machine	6
5.2 Performance testing paper	6
5.3 Eraser	6
5.4 Reproducibility apparatus	6
5.5 Light test apparatus	6
6 Testing	7
6.1 Sampling	7
6.2 Climatic conditions for testing	7
6.3 Procedure	7
6.3.1 Writing performance test	7
6.3.2 Strike through test	7
6.3.3 Drying time test	7
6.3.4 Reproducibility test	7
6.3.5 Water resistance test	7
6.3.6 Light resistance test	8
6.3.7 Cap-off time test	8
6.3.8 Shelf life test	8
7 Designation and marking	8
7.1 Designation	8
7.2 Marking	8
8 Test report	9
Annex A (informative) Explanatory note on gel ink	10
Bibliography	11

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 10, *Technical product documentation*.

This second edition cancels and replaces the first edition (ISO 27668-1:2009), of which it constitutes a minor revision.

ISO 27668 consists of the following parts, under the general title *Gel ink ball pens and refills*:

- *Part 1: General use*
- *Part 2: Documentary use (DOC)*

Introduction

This part of ISO 27668 is applicable to gel ink ball pens for general use.

ISO 27668-2 is applicable to gel ink ball pens for documentary use.

For documentary use, some requirements, in addition to those for general use, are necessary

- a) to assure the legibility of lettering, and
- b) for the handling and storage of documents over long periods of time (these requirements are often discussed with the archivist).

An example of documentary use is the preparation of documents that are required as evidence.

Furthermore, pens which meet the requirements for documentary use produce lines which are more resistant to modification (e.g. attempts to falsify a document) than those for general use.

The International Organization for Standardization (ISO) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning aqueous gel ink-filled ballpoint pens.

The holder of this patent right has assured ISO that he is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ISO. Information may be obtained from:

Mitsubishi Pencil Company Limited

Patent Administration Department, 5-23-37, Higashi-ohi

JP-Shinagawa, Tokyo 140-8537

Japan

oomorih@mpuni.co.jp

ISO 27668-1:2016

<https://standards.iteh.ai/catalog/standards/iso/6e498d39-2f7e-49a9-98a1-a258c2bdad11/iso-27668-1-2016>

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ISO shall not be held responsible for identifying any or all such patent rights.

