

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS S 6061 : 2020

(JWIMA/JSA)

Gel ink ball pens and refills

ICS 01.100.40 ; 97.180

Reference number : JIS S 6061 : 2020 (E)

PROTECTED BY COPYRIGHT

13 S

S 6061 : 2020

Date of Establishment: 2005-01-20

Date of Revision: 2020-12-21

Date of Public Notice in Official Gazette: 2020-12-21

Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area

JIS S 6061 : 2020, First English edition published in 2021-10

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2021

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

HN

PROTECTED BY COPYRIGHT

Contents

	Page
Introduction	1
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Classification	3
4.1 Classification according to use and structure	3
4.2 Classification of refills according to shape and dimensions	3
4.3 Classification according to line width and ball diameter	4
5 Quality	4
5.1 Viscosity of gel ink	4
5.2 Quality of gel ink ball pens and refills	4
5.3 Safety requirements for caps	5
6 Shape, dimensions and structure of refill	6
7 Materials	7
8 Test equipment, apparatuses and solutions	8
8.1 Viscometer	8
8.2 Write test machine	8
8.3 Performance testing paper	8
8.4 Eraser	9
8.5 Reproducibility apparatus	9
8.6 Light test apparatus	9
8.7 Test solutions	9
9 Testing	9
9.1 Test samples and test pieces	9
9.2 Climatic conditions for testing	9
9.3 Procedure	9
10 Inspection method	12
10.1 General	12
10.2 Type inspection	12
10.3 Delivery inspection	13
11 Marking	13
Annex JA (informative) Comparison table between JIS and corresponding International Standards	16

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Writing Instruments Manufacturers Association (JWIMA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied *mutatis mutandis* pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS S 6061:2010**), which has been technically revised.

This **JIS** document is protected by the Copyright Act.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

Gel ink ball pens and refills

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 27668-1** : 2017, Edition 3 and **ISO 27668-2** : 2009, Edition 1 with some modifications of the technical contents to reflect the actual usage of the products in Japan.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JA.

1 Scope

This Standard specifies the requirements for gel ink ball pens and refills for general and documentary use (hereafter referred to as gel ink ball pens and refills, respectively).

NOTE The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 27668-1 : 2017 *Gel ink ball pens and refills — Part 1 : General use*

ISO 27668-2 : 2009 *Gel ink ball pens and refills — Part 2 : Documentary use* (DOC) (overall evaluation : MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS K 0116 *General rules for atomic emission spectrometry*

JIS K 0121 *General rules for atomic absorption spectrometry*

JIS K 6253-3 *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 3 : Durometer method*

JIS K 8085 *Ammonia solution (Reagent)*

JIS K 8101 *Ethanol (99.5) (Reagent)*

JIS K 8180 *Hydrochloric acid (Reagent)*

JIS L 0804 *Grey scale for assessing change in colour*

NOTE Corresponding International Standard : ISO 105-A02 *Textiles — Tests for colour fastness — Part A02 : Grey scale for assessing change in colour*