
**Information technology — Print
cartridge characterization —**

**Part 2:
Cartridge characterization data
reporting**

iTeh STANDARD PREVIEW
*Technologies de l'information — Caractérisation de cartouche
d'impression —
(standards.iteh.ai)*
Partie 2: Rapport de données de caractérisation de cartouche

ISO/IEC 29142-2:2013

<https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO/IEC 29142-2:2013](https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013)
<https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013>



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2013

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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Essential elements of cartridge characterization customer information.....	2
4.1 Cartridge information summary.....	2
5 Cartridge labels.....	3
5.1 Cartridge label application.....	3
5.2 Cartridge label location.....	3
5.3 Cartridge label information.....	3
6 Cartridge notifications.....	4
6.1 Cartridge notification application.....	4
6.2 Cartridge notification location.....	4
6.3 Cartridge notification information.....	5
7 Reporting structure.....	6
8 Customer reports.....	7
8.1 Customer report application.....	7
8.2 Customer report location.....	8
8.3 Customer report information.....	8
9 Cartridge attribute test reports.....	10
9.1 Cartridge attribute test report application.....	10
9.2 Cartridge attribute test report location.....	10
9.3 Cartridge attribute test report information.....	11
Annex A (normative) Cartridge attribute checklist for ISO/IEC 29142 compliant cartridge characterization tests.....	13
Annex B (normative) Yield Standards Customer Reports and Cartridge Attribute Test Reports.....	14

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

ISO/IEC 29142-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 28, *Office equipment*.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/IEC 29142-2:2013](https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013)

<https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013>

Introduction

The purpose of this part of ISO/IEC 29142 is to provide consistent documentation and reporting methods, for customer understanding, for the cartridge characterization test methods and provisions of ISO/IEC 29142. Specifications for notification and reporting applicable for the ink and toner cartridge attribute characterization methods established in ISO/IEC 29142, and the environmental provisions established in ISO/IEC 29142-3, are given in this part of ISO/IEC 29142.

Attributes characterized according to ISO/IEC 29142 standardized or specified test methods that comply with the test method requirements defined in ISO/IEC 29142-1, and environmental evaluations additionally in compliance with the provisions of ISO/IEC 29142-3, after inclusion in ISO/IEC 29142-2, [Annex A](#), can be chosen for reporting, based on the manufacturer decision regarding the importance of the attributes and provisions to the intended customer. This part of ISO/IEC 29142 defines the documentation and reporting that are required to be used, if such an attribute is chosen to be characterized and reported.

Such reported attributes and provisions do not provide for a complete cartridge attribute characterization; however, the consistent information provided for each attribute, and the consistent testing underlying that information, enables comparison of provided provisions and attribute characterization results.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/IEC 29142-2:2013](#)

<https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO/IEC 29142-2:2013

<https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-10a3d96d063b/iso-iec-29142-2-2013>

Information technology — Print cartridge characterization —

Part 2: Cartridge characterization data reporting

1 Scope

This part of ISO/IEC 29142 establishes the product and package labelling, and related reporting provisions for toner and ink cartridges used in printing devices that have a digital input printing path, including multi-function devices. This part of ISO/IEC 29142 is intended for equipment used in office environments.

This part of ISO/IEC 29142 defines the information requirements for the cartridge characterization documentation on packaging and cartridges, and in reports.

The labels, notifications, and reports established herein are specified in accordance with the terms, symbols, notations and framework of ISO/IEC 29142-1. The cartridge characterization tests that determine the test report information of the labels, notifications, and reports established herein are standardized or specified in parts of the ISO/IEC 29142 series.

(standards.iteh.ai)

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 19752, *Information technology — Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components*

ISO/IEC 19798, *Method for the determination of toner cartridge yield for colour printers and multi-function devices that contain printer components*

ISO/IEC 24711, *Method for the determination of ink cartridge yield for colour inkjet printers and multi-function devices that contain printer components*

ISO/IEC 29142-1, *Information technology — Print cartridge characterization — Part 1: General: terms, symbols, notations and cartridge characterization framework*

ISO/IEC 29142-3, *Information technology — Print cartridge characterization — Part 3: Environment*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 29142-1 and the following apply.

3.1

cartridge attribute checklist

list of available cartridge characterization tests, containing the defining standard or specification identifier, the attribute name, and the test result availability indicator, for each standardized or specified ISO/IEC 29142 cartridge characterization test to be provided in each customer report with a yes or no indication of whether cartridge characterization results are available for each of the listed tests

3.2

cartridge attribute test report

report including the information of a cartridge customer report and the detailed cartridge characterization results of an ISO/IEC 29142 cartridge characterization test reported for customer presentation according to a required format

Note 1 to entry: The format is prescribed according to each ISO/IEC 29142 standardized or specified cartridge characterization test and is in compliance with ISO/IEC 29142-2.

3.3

cartridge collector

any party providing a cartridge take-back or collection program

EXAMPLE A business entity designated to collect cartridges.

3.4

cartridge identifier

formatted human readable arrangement of information uniquely specifying a distinct cartridge

3.5

cartridge label

formatted human readable arrangement of information containing at least the cartridge identifier, displayed on the cartridge and also on the cartridge package in the case of retail cartridge packaging

3.6

cartridge notification

human readable information to be included in accordance with ISO/IEC 29142 and, presented according to ISO/IEC 29142-2, containing at least the cartridge identifier, the cartridge supplier identification, and the cartridge colourant information, primarily located on cartridge packaging

3.7

cartridge packaging

<retail> containment and customer information materials surrounding a cartridge placed for direct customer purchase

ISO/IEC 29142-2:2013

<https://standards.iteh.ai/catalog/standards/sist/445f1411-48e5-4ffc-a4e2-611111111111>

3.8

cartridge packaging

<bulk> containment materials surrounding a cartridge for shipping, not intended for direct customer purchase

3.9

cartridge supplier

cartridge marketer, manufacturer, remanufacturer, refiller, or distributor, being the party or parties responsible for marketing the cartridge and providing customer support for the cartridge

3.10

customer report

report, including a cartridge notification, and a cartridge attribute checklist, with summary results of selected ISO/IEC 29142 cartridge attribute characterization tests, presented according to a required format

Note 1 to entry: The format is prescribed according to each ISO/IEC 29142 standardized or specified cartridge characterization test and is in compliance with ISO/IEC 29142-2.

4 Essential elements of cartridge characterization customer information

4.1 Cartridge information summary

[Table 1](#) summarizes the information that is detailed below in the various label, notification, customer reports, and cartridge attribute test report clauses. The table summarizes cartridge information for customers according to this International Standard.

Table 1 — Cartridge information

Information Items	Addressed in Cartridge Label	Addressed in Cartridge Notification
Environmental Responsibility	A locator for an operational Cartridge Take-back program should be provided on the cartridge itself.	A cartridge supplier offering an operational cartridge take-back program should include “Cartridge Take-back Information” or equivalent wording, along with a link to program use information. A cartridge supplier not offering an operational cartridge take-back program shall not include such an indicator or link.
Performance Attributes	no	A customer report can contain performance attribute test results.
Physical Attributes	no	A customer report can contain physical attribute test results.
Supplier Type	The distinction of original or non-original supplier is indicated by the requirement to identify the cartridge supplier.	The distinction of original or non-original supplier is addressed through the requirement to include the cartridge supplier name, and by the requirement that only a single supplier identifier is discoverable or readable on the cartridge, accompanying packaging and in related ISO/IEC 29142 reports.
Cartridge Condition	<p>The terms ‘Remanufactured’ or ‘Refilled’ are neither required nor disallowed in this part of ISO/IEC 29142 and such marking should follow applicable regulations.</p> <p>In compliance with ISO/IEC 29142, the environmental impact of a cartridge shall be assessed by means of standards written in accordance with ISO/IEC 29142-3. Cartridge environmental impact assessment shall not be based on whether the cartridge is original, non-original, remanufactured, or refilled. These cartridge conditions do not indicate the environmental impact of the cartridge supplier’s manufacturing and/or remanufacturing processes.</p>	<p>The terms “Remanufactured” or “Refilled” are neither required nor disallowed in this part of ISO/IEC 29142 and such marking should follow applicable regulations.</p> <p>In compliance with ISO/IEC 29142, the environmental impact of a cartridge shall be assessed by means of standards written in accordance with ISO/IEC 29142-3. Cartridge suppliers and collectors should be aware that cartridge environmental assessment is not based on whether the cartridge is original, non-original, remanufactured, or refilled. These cartridge conditions do not indicate the environmental impact of the cartridge supplier’s manufacturing and/or remanufacturing processes.</p>

5 Cartridge labels

5.1 Cartridge label application

This part of ISO/IEC 29142 imposes NO requirements dealing with cartridge label format. In the context of this International Standard, a cartridge label is defined only as a particular set of information.

5.2 Cartridge label location

The cartridge label shall be displayed on the cartridge. The cartridge label shall also be displayed on retail cartridge packaging. The cartridge label should be displayed on bulk cartridge packaging.

5.3 Cartridge label information

5.3.1 Cartridge identification

The cartridge label shall contain a cartridge identifier.

5.3.2 Referencing ISO/IEC 29142

The cartridge label shall not include reference to “ISO/IEC 29142” in any context.

5.3.3 Colourant identification

A cartridge label shall include the alphanumeric formatted human readable colour names and/or representatively coloured images of the colourant(s) included in the cartridge.

5.3.4 Cartridge supplier identification

A cartridge label shall include a distinctive identifier for the cartridge supplier, which shall identify the party and/or parties responsible for marketing the cartridge and providing customer support for the cartridge. The cartridge supplier identifier may be the supplier name, trademark, logo, or other distinctive supplier mark.

When a cartridge is marketed or distributed, each cartridge supplier shall ensure that no label, name, logo, distinctive mark or trademark of another cartridge supplier is readable or discoverable on the cartridge, accompanying packaging, or related customer and cartridge attribute test reports.

5.3.5 Cartridge take-back and collection program identification

The cartridge label should contain information (for example, a company logo or URL) useful to guide customers to information about the operational Cartridge Take-back program offered by the cartridge supplier. Such information is recommended to address the problem that at disposal time users might not have access to the cartridge packaging.

5.3.6 Cartridge label information chart

ISO/IEC 29142-2:2013
<https://standards.iteh.ai/catalog/standards/sist/111-48e5-4fc-a4e2-10a3d96d062b/iso-iec-29142-2-2013>
Table 2 – Cartridge Label

Information Name	Information Detail
Cartridge Identification	Cartridge Identifier
Colourant Identification	e.g. “CMYK” and e.g. coloured icons
Cartridge Supplier Identification	Distinctive identifier for the cartridge supplier
Take-Back Program Indicator	In the case that the cartridge supplier offers an operational take-back program, the label should include sufficient means to guide a user to the applicable Cartridge Take-back program information. A cartridge supplier not offering an operational cartridge take-back program shall not include such an indicator or link in the label.

6 Cartridge notifications

6.1 Cartridge notification application

This part of ISO/IEC 29142 imposes NO requirements dealing with cartridge notification format. In the context of this part of ISO/IEC 29142 a cartridge notification is defined only as a particular set of information.

6.2 Cartridge notification location

The cartridge notification shall be displayed on retail cartridge packaging and should be displayed on bulk cartridge packaging. The cartridge notification may appear on the cartridge.

6.3 Cartridge notification information

6.3.1 Cartridge identification

The cartridge notification shall include the cartridge identifier.

6.3.2 Referencing ISO/IEC 29142

The cartridge notification shall not include reference to “ISO/IEC 29142” in any context.

In addition to the requirements of ISO/IEC 29142 stated in this part of ISO/IEC 29142, notification of cartridge characterization testing in compliance with ISO/IEC 29142 is exclusively reserved to cartridge characterization tests standardized or specified in parts of ISO/IEC 29142.

6.3.3 Access to ISO/IEC 29142 customer reports

A cartridge notification should include a URL that provides access to or a method to access at least one ISO/IEC 29142-2 compliant customer report.

6.3.4 Colourant identification

A cartridge notification shall include the alphanumeric formatted human readable colour names and/or representatively coloured images of the colourant(s) included in the cartridge.

6.3.5 Cartridge supplier identification

A cartridge notification shall include a distinctive identifier for the cartridge supplier, which shall identify the party and/or parties responsible for marketing the cartridge and providing customer support for the cartridge. The cartridge supplier identifier may be the supplier name, trademark, logo, or other distinctive supplier mark.

The information identifying the cartridge supplier shall include at least a URL or direct contact information. The URL shall point to a website containing the cartridge supplier contact information, such as company name, surface mail address, email address, telephone number and/or FAX number of these responsible parties. Alternatively, the cartridge supplier may provide contact information directly in the cartridge notification.

When a cartridge is marketed or distributed, each cartridge supplier shall ensure that no label, name, logo, distinctive mark or trademark of another cartridge supplier is readable or discoverable on the cartridge, accompanying packaging, or related customer reports and cartridge attribute test reports.

The font and font size shall be clearly legible and prominent.

6.3.6 Cartridge take-back or collection program identification

A cartridge supplier offering an operational cartridge take-back program should include the statement “Cartridge Take-back Information” or equivalent wording, as part of the ISO/IEC 29142 cartridge notification. With the Cartridge Take-back Information statement, a cartridge supplier shall include an associated URL pointing to a website describing the use and applicability of an operational cartridge take-back or collection program.

On an annual basis, the cartridge supplier shall provide on its website the cartridge end-of-life management methods for all cartridges collected through its take-back program over the preceding year. The cartridge supplier shall report the following:

Total tonnage of cartridges collected annually (in metric tons)

Total tonnage of collected materials not yet dispositioned (at the time of the report)