# INTERNATIONAL STANDARD

# ISO 19712-1

First edition 2008-04-15

# Plastics — Decorative solid surfacing materials —

Part 1: Classification and specifications

Plastiques — Matériaux décoratifs massifs de revêtement de surface — Partie 1: Classification et spécifications



Reference number ISO 19712-1:2008(E)

#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below

This document is a preview denerated by Fig.



## **COPYRIGHT PROTECTED DOCUMENT**

#### © ISO 2008

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 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

Forew	ord	iv
Introd	uction	. v
1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4 4.1 4.2	Requirements . Compliance Notes on requirements for reaction to fire	2
5 5.1 5.2 5.3 5.4 5.5 Annex	Properties	3 4
Biblio	A (informative) Hygienic, health and safety information for solid surfacing materials (SSM) intended for interior use	8
	T	

5

# 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 traison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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

The main task of technical convertees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires applying by at least 75 % of the member 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 shall not be held responsible for identifying any or all such patent rights.

ISO 19712-1 was prepared by Technical Committee ISO/TC 61, Plastics, Subcommittee SC 11, Products.

ISO 19712 consists of the following parts, under the general title Plastics - Decorative solid surfacing materials:

Part 1: Classification and specifications Part 2: Determination of properties — Sheet goods Part 3: Determination of properties — Solid surface shapes 4 generated by FLS

© ISO 2008 – All rights reserved

This part of ISO 19712 is intended for use by manufacturers, fabricators, installers and specifiers of solid

The test methods and minimum performance values presented have been related as closely as possible to end-use applications. The fabrication method and technique employed may have a bearing on product

The performance requirements include, but are not limited to, impact resistance, structure, renewability, colourfastness, cleanability stain resistance, water resistance, chemical resistance, bacterial and fungal

<section-header><section-header><section-header>

this document is a preview denerated by EUS

# Plastics — Decorative solid surfacing materials —

# Part 1: Classification and specifications

SAFETY STATEMENT — Persons using this document should be familiar with normal laboratory practice, if applicable. This document does not purport to address all of the safety problems, if any, associated with its user to establish appropriate safety and health practices and to ensure pompliance with any regulatory conditions.

#### 1 Scope

This part of ISO 19712 establishes a classification system for solid surfacing materials according to their performance. 3

This part of ISO 19712 also specifies property requirements for the various types of solid surfacing materials covered by this classification. Requirements are specified for the types that are most generally used, but additional types may be added as required. The specified limit values apply to the most commonly used types of material, but within each classification it may be possible to obtain variants having much higher performance values.

These materials are characterized by their homogenedus appearance, renewable surfaces and inconspicuous seams. They are generally classified as follows.

Solid surface sheets a)

> vertical, wet and dry applications. Solid surfacing sheets are designed for horizontal,

Solid surface shapes b)

Solid surface shapes include, but are not limited to, kitchesinks, bathroom sinks, vanity tops, DJ FLYS

The important properties of solid surfacing materials are

- water resistance.
- thermal shock resistance.
- heat resistance,
- impact resistance,
- stain and chemical resistance,
- cigarette burn resistance,
- colour stability,

- hardness,
- bacterial and fungal resistance,
- cleanability,
- hygiene,
- seamability,
- renewability.

# 2 Normative references

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

ISO 19712-2:2007, Plastics — Decoration solid surfacing materials — Part 2: Determination of properties — Sheet goods

ISO 19712-3:2007, Plastics — Decorative solid surfacing materials — Part 3: Determination of properties — Solid surface shapes

# 3 Terms and definitions

For the purposes of this part of ISO 19712, the following terms and definitions apply.

#### 3.1

#### solid surfacing material

SSM

material, composed of polymeric materials together with pigments and fillers, intended to be cast into sheets or shaped products

NOTE 1 The material is of the same composition throughout the whole thickness of the sheet or product.

NOTE 2 Sheets and products made from SSMs are repairable and renewable to the original finish.

NOTE 3 SSMs can also be fabricated into continuous sheets with inconspicuous seams

## 4 Requirements

#### 4.1 Compliance

The performance requirements for solid surfacing materials shall meet the requirements of every property for which a value or range is specified in Clause 5.

Two methods of test are given for the measurement of resistance to wet heat, thermal cycle testing, chemical resistance, resistance to staining, resistance to cigarette burns. Three are given for the measurement of light fastness, resistance to dry heat. When there is a choice of method, material satisfying the requirements of either/any of the methods shall be deemed to comply with the specification for that property; however, the choice of method may be agreed upon between the interested parties. The method selected shall be stated in the test report.