INTERNATIONAL STANDARD

ISO 20507

Third edition
2022-07

Fine ceramics (advanced ceramics, advanced technical ceramics) — Vocabulary

Céramiques techniques — Vocabulaire

Reference number
ISO 20507:2022(E)

© ISO 2022



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

© ISO 2022 – All rights reserved

Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

3.1 General terms 1

3.2 Terms for forming and processing 11

3.3 Terms for properties and testing 21

3.4 Terms for ceramic materials 26

Bibliography **33**

Index **34**

© ISO 2022 – All rights reserved

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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 206, *Fine ceramics*.

This third edition cancels and replaces the second edition (ISO 20507:2014), which has been technically revised.

The main changes to the previous edition are as follows:

— abbreviations integrated into Clause 3;

— many composite-related terms added.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

© ISO 2022 – All rights reserved

Fine ceramics (advanced ceramics, advanced technical ceramics) — Vocabulary

1 Scope

This document specifies terms and associated definitions which are typically used for fine ceramic (advanced ceramic, advanced technical ceramic) materials, products, applications, properties and processes. This document also contains those abbreviated terms which have found general acceptance in scientific and technical literature; they are given together with the corresponding full terms and definitions or descriptions.

In this document, terms are defined using the term 'fine ceramic'. The definitions apply equally to 'advanced ceramics' and 'advanced technical ceramics', which are considered to be equivalent.

This document does not include terms which, though used in the field of fine ceramics, are of a more general nature and are also well known in other fields of technology.

NOTE Terms and definitions of a more general nature are available in ASTM C 1145-2019, EN 14232 and JIS R 1600.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1 General terms

3.1.1
advanced ceramic
advanced technical ceramic
fine ceramic
highly engineered, high performance, predominately non-metallic, inorganic, ceramic material having specific functional attributes

Note 1 to entry: The use of fine ceramic, advanced ceramic and advanced technical ceramic is interchangeably accepted in business, trade, scientific literature and International Standards.

3.1.2
antibacterial ceramic
fine ceramic that reveals surface antibacterial activity, usually associated with an antibacterial agent or photocatalytic behaviour, and is widely used for sanitary ware, tiles and various kinds of apparatus

3.1.3
bio-sourced ceramic
fine ceramic produced from bio-sourced material

© ISO 2022 – All rights reserved