INTERNATIONAL STANDARD

ISO 20819-2

First edition 2023-02

Plastics — Wood-plastic recycled composites (WPRC) —

Part 2: Test methods

Plastiques — Composites recyclés bois-plastique (WPRC) — Partie 2: Méthodes d'essai



Reference number ISO 20819-2:2023(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2023

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

Page

Contents

Forev	/ord	iv
Intro	luction	v
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Quality4.1Appearance4.2Basic physical properties and durability	2 2 2
5	Test method5.1Sampling of test specimens5.2Appearance tests5.3Basic physical property tests and Durability tests	
6	Reports	
Anne	x A (informative) Guide for standard of material performance	

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/TC61, *Plastics*, Subcommittee SC11, *Products*.

A list of all parts in the ISO 20819 series can be found on the ISO website.

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 <u>www.iso.org/members.html</u>.

Introduction

Wood-plastic composites (WPC) are composites of natural fibres such as wood and various plastics. ISO 16616 has been established as the ISO for such products. WPC is commonly used for exterior materials such as wood decks and louvers, and interior materials such as doors and flooring.

To protect the global environment, it is required to promote the recycling of plastics. WPCs that use such recycled plastics are called wood-plastic recycled composites (WPRC). The quality of recycled plastics such as WPRC is lower than that of virgin plastics, and there are concerns about the inclusion of harmful substances, which may make consumers hesitant when choosing WPRC using recycled plastics. On the other hand, it is also necessary to provide appropriate information to consumers who want to purchase environmental-friendly products with a higher recycling rate.

ISO 20819-1 is a calculation method of recycling ratio, labelling, and safety test. Safety testing for hazardous substances is necessary to dispel consumer concerns about contamination with hazardous substances when using recycled materials. ISO 20819-2 provides a test method for product durability that is expected when recycled plastic is used. There has never been an ISO standard that specializes in using recycled plastics in this way. It also stipulates test methods for cellular products not mentioned in ISO 16616.

This document has been established so that consumers' anxiety can be reduced by conducting the tests specified in this document, and environmental-friendly and safe products using recycled plastic can be selected.

ISO 20819-2:2023 - Preview only Copy via ILNAS e-Shop