

IAPMO IGC 189-2019

Internal Pipe Epoxy Barrier Coating Material for Application in Pressurized (closed) Water Piping Systems



IAPMO Standard

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Contents

Preface	ii
IAPMO Standards Review Committee	iv
1 Scope	1
1.1 General.....	1
1.2 Alternative Materials	1
1.3 Terminology	1
1.4 Units of Measurement.....	2
2 Reference Publications.....	2
3 Definitions and Abbreviations.....	3
4 General Requirements	3
4.1 Barrier Materials	3
4.2 Mixing and Dispensing	3
5 Testing Requirements	4
5.1 Pull-off Strength Test.....	4
5.2 Adhesion Test	4
5.3 Immersion Test	4
6 Markings and Accompanying Literature	5

Preface

This is the fifth edition of IAPMO IGC 189, Internal Pipe Epoxy Barrier Coating Material for Application in Pressurized (closed) Water Piping Systems. This Standard supersedes IAPMO IGC 189-2008, Internal Pipe Epoxy Barrier Coating Material for Application in Pressurized (closed) Water Piping Systems. The previous editions of this standard are: February 2008, September 2006, August 2004, September 2003.

This Standard was developed by the IAPMO Standards Review Committee (SRC) in accordance with the policies and procedures regulating IAPMO industry standards development, Policy S-001, Standards Development Process. This Standard was approved as an IAPMO Industry Standard on July 15, 2019.

Notes:

- (1) *The use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- (2) *The use of IAPMO Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.*
- (3) *This standard was developed using an open process and in accordance with IAPMO Standards Policy S-001, Standards Development Process, which is available on the IAPMO Standards website (www.IAPMOstandards.org).*
- (4) *During its development, this Standard was made available for public review, thus providing an opportunity for additional input from stakeholders from industry, academia, regulatory agencies, and the public at large. Upon closing of public review, all comments received were duly considered and resolved by the IAPMO Standards Review Committee.*
- (5) *This Standard was developed in accordance with the principles of consensus, which is defined as substantial agreement; consensus implies much more than a simple majority, but not necessarily unanimity. It is consistent with this definition that a member of the IAPMO Standards Review Committee might not be in full agreement with all sections of this Standard.*
- (6) *Although the intended primary application of this Standard is stated in its scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- (7) *IAPMO Standards are subject to periodic review and suggestions for their improvement will be referred to the IAPMO Standards Review Committee. To submit a proposal for change to this Standard, you may send the following information to the International Association of Plumbing and Mechanical Officials, Attention Standards Department, at standards@IAPMOstandards.org or, alternatively, at 4755 East Philadelphia Street, Ontario, California, 91761, and include "Proposal for change" in the subject line:*
 - (a) *standard designation (number);*
 - (b) *relevant section, table, or figure number, as applicable;*
 - (c) *wording of the proposed change, tracking the changes between the original and the proposed wording;*
and
 - (d) *rationale for the change.*
- (8) *Requests for interpretation should be clear and unambiguous. To submit a request for interpretation of this Standard, you may send the following information to the International Association of Plumbing and Mechanical Officials, Attention Standards Department, at standards@IAPMOstandards.org or, alternatively, at 4755 East Philadelphia Street, Ontario, California, 91761, and include "Request for interpretation" in the subject line:*
 - (a) *the edition of the standard for which the interpretation is being requested;*
 - (b) *the definition of the problem, making reference to the specific section and, when appropriate, an illustrative sketch explaining the question;*
 - (c) *an explanation of circumstances surrounding the actual field conditions; and*
 - (d) *the request for interpretation phrased in such a way that a "yes" or "no" answer will address the issue.*
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- (11) Participation by federal or state agency representative(s) or person(s) affiliated with industry is not to be interpreted as government or industry endorsement of this Standard.*
- (12) Proposals for amendments to this Standard will be processed in accordance with the standards-writing procedures of IAPMO industry standards development, Policy S-001, Standards Development Process.*

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Internal Pipe Epoxy Barrier Coating Material for Application in Pressurized (closed) Water Piping Systems

1 Scope

1.1 General

1.1.1 This standard covers mechanically applied epoxy barrier coatings to the interior of pressurized (closed) water piping systems and specifies requirements for materials, physical characteristics, performance testing, and markings.

1.1.2 This standard does not cover design or testing of epoxy barrier coating for use with fire sprinkler piping system.

1.2 Alternative Materials

The requirements of this standard are not intended to prevent the use of any alternative materials or methods of construction provided such alternatives meet the intent and requirements of this standard.

1.3 Terminology

In this Standard,

- (a) "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy to comply with the Standard;
- (b) "should" is used to express a recommendation, but not a requirement;
- (c) "may" is used to express an option or something permissible within the scope of the Standard; and
- (d) "can" is used to express a possibility or a capability.

Notes accompanying sections of the Standard do not specify requirements or alternative requirements; their purpose is to separate explanatory or informative material from the text. Notes to tables and figures are considered part of the table or figure and can be written as requirements.

1.4 Units of Measurement

SI units are the primary units of record in global commerce. In this Standard, the inch/pound units are shown in parentheses. The values stated in each measurement system are equivalent in application, but each unit system is to be used independently. All references to gallons are to U.S. gallons.