
**Vitreous and porcelain enamels —
Glass-lined apparatus for process
plants —**

**Part 2:
Designation and specification of
resistance to chemical attack and
thermal shock**

*Émaux vitrifiés — Appareils émaillés pour les installations
industrielles —*

*Partie 2: Désignation et spécifications de la résistance à l'attaque
chimique et au choc thermique*



Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Designation	1
4 Quality requirements	2
4.1 Rate of corrosion in hydrochloric acid	2
4.2 Rate of corrosion in sodium hydroxide solution	2
4.3 Crack formation temperature	2
Bibliography	3

Sample Document

get full document from standards.iteh.ai

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 107, *Metallic and other inorganic coatings*.

This second edition of ISO 28721-2 cancels and replaces the first edition (ISO 28721-2:2008), of which it constitutes a minor revision.

ISO 28721 consists of the following parts, under the general title *Vitreous and porcelain enamels — Glass-lined apparatus for process plants*:

- *Part 1: Quality requirements for apparatus, components, appliances and accessories*
- *Part 2: Designation and specification of resistance to chemical attack and thermal shock*
- *Part 3: Thermal shock resistance*
- *Part 4: Quality requirements for glass-lined flanged steel pipes and flanged steel fittings*
- *Part 5: Presentation and characterisation of defects*

Introduction

For many materials, the chemical composition can serve as a basis for a specification. This is not possible for chemical enamels because the composition is tied very closely to the specific enamelling technique and is therefore not disclosed by the manufacturer for competitive reasons. In order to ascribe measurable attributes to an enamel besides its general designation, the manufacturer conducts standardized tests and specifies its enamel in terms of the resulting resistance to corrosion and thermal shock, together with a declaration of the structure of the cover coat enamel and the colour of the enamel.

The quality requirements stated in this part of ISO 28721 represent the minimum requirements a chemical enamel is expected to meet based on the current state of the art.

Sample Document

get full document from standards.iteh.ai