
**Petroleum, petrochemical and natural gas
industries — Non-metallic materials in
contact with media related to oil and gas
production —**

**Part 2:
Elastomers**

*Industries du pétrole, de la pétrochimie et du gaz naturel — Matériaux
non métalliques en contact avec les fluides relatifs à la production de
pétrole et de gaz —*

Partie 2: Élastomères



Reference number
ISO 23936-2:2011(E)

© ISO 2011



COPYRIGHT PROTECTED DOCUMENT

© ISO 2011

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

Page

Foreword	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms, definitions and abbreviated terms	2
3.1 Terms and definitions	2
3.2 Abbreviated terms	4
4 Technical requirements	4
5 Documentation requirements	5
6 Requirements for manufacturers.....	6
6.1 General requirements	6
6.2 Validation of compliance	7
7 Qualification of elastomer materials (ageing and RGD).....	8
7.1 General	8
7.2 Requirements for ageing tests.....	8
7.3 Requirements for rapid gas decompression testing	9
8 Qualification of elastomeric materials in bonded flexible hose	9
8.1 General	9
8.2 Qualification of bonded flexible hose liner material.....	10
8.3 Qualification of bonded flexible hose – Layers outside the liner.....	14
9 Qualification of elastomeric materials in other large components	15
9.1 General	15
9.2 Qualification of elastomeric materials in flexible joints	15
9.3 Qualification of elastomeric materials in blow-out preventers.....	15
9.4 Qualification of elastomeric materials for packers	16
Annex A (normative) Test media, conditions, equipment and procedures for ageing of elastomeric materials	17
Annex B (normative) Test media, conditions, equipment and procedures for rapid gas decompression testing of elastomeric materials.....	26
Annex C (informative) Most commonly used elastomeric materials	40
Annex D (normative) Procedure for estimation of material service life using the Arrhenius relationship	42
Annex E (informative) Physical and chemical ageing	47
Annex F (informative) Rapid gas decompression (RGD).....	62
Bibliography.....	66