

**Tihendusmaterjalid metallist
keermesühendustele kontaktis 1., 2. ja 3.
põlvkonna gaasidega ja kuuma veega. Osa
2: Mittekõvenevad ühenduskompaundid**

Sealing materials for metallic threaded joints in
contact with 1st, 2nd and 3rd family gases and hot
water - Part 2: Non-hardening jointing compounds

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 751-2:1999 sisaldab Euroopa standardi EN 751-2:1996 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 751-2:1999 consists of the English text of the European standard EN 751-2:1996.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>Käesolev Euroopa standard määrab kindlaks nõuded ja testimismeetodid mittekõvenevatele tihendusmaterjalidele (edaspidi nimetatud kui ühenduskompaundid), mis sobivad metallist keermesühenduste tihendamiseks, mis vastavad standardi ISO 7-1 nõuetele. Need ühenduskompaundid on kasutamiseks kontaktis 1. põlvkonna gaasidega (majapidamisgaas), 2. põlvkonna gaasidega (maagaas) ja 3. põlvkonna gaasidega (veeldatud naftagaasid (LPG), välja arvatud LPG-gaasid vedelas olekus) ning küttesüsteemide kuuma veega (klass A), gaasiseadmetes ja nende abiseadmetes (klass B), samuti LPG-gaaside säilitamisel.</p>	<p>Scope:</p>
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ICS 23.040.80

Võtmesõnad: efektiivsus, gaasitorud, keermesliitmikud, kuum vesi, liigitused, märgistus, tehnilised andmed, testimine, tihendusmaterjalid, toruliitmikud, veetorud

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Descriptors: Gas pipes, sealing materials, threaded joints.

English version

**Sealing materials for metallic threaded joints in
contact with 1st, 2nd and 3rd family gases
and hot water**

Part 2: Non-hardening jointing compounds

Matériaux d'étanchéité pour raccords
filetés en contact des gaz de la 1ère,
2ème et 3ème famille et de l'eau
chaude – Partie 2: Composition
d'étanchéité non durcissante

Dichtmittel für metallene Gewinde-
verbindungen in Kontakt mit
Gasen der 1., 2. und 3. Familie und
Heißwasser – Teil 2: Nichtaushärtende
Dichtmittel

This European Standard was approved by CEN on 1996-11-24.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 108 'Sealing materials and lubricants for gas appliances and gas equipment', the Secretariat of which is held by NNI.

This European Standard comprises the following Parts:

Part 1 Anaerobic jointing compounds

Part 2 Non-hardening jointing compounds

Part 3 Unsintered PTFE tapes

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of the relevant EU Directives.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 1997 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Introduction

This European Standard specifies requirements and test methods for non-hardening sealing materials (jointing compounds) for metallic threaded joints. These jointing compounds applied as liquid, gel, paste or tape of non-woven synthetic fibres impregnated with jointing compound paste do at the most only partly harden or cure. This enables the threaded joint to be easily dismantled with commercial tools at ambient temperatures without damage of the threads.

There are three classes of jointing compounds defined by their properties and application range. Class A jointing compounds are suitable for normal installation purposes for 1st, 2nd and 3rd family gases and heating systems. Class B jointing compounds are normally used in gas appliances and their auxiliary equipment, whereas Class C jointing compounds are for use in LPG storage application. Jointing compounds may be suitable for one or more classes.

A universally applicable jointing compound may be used for all gas, potable water, and hot water installation.

In respect of potential adverse effects of the jointing compounds covered by this European Standard on the quality of water intended for human consumption this Standard provides no information as to whether the jointing compounds may be used without restriction in any of the Member States of the EU or EFTA. The use and characteristics of the jointing compounds should comply with current regulations, where they exist, depending the acceptance of verifiable European criteria.

Since the application techniques - sometimes due to different pressure limits and safety requirements - differ from country to country, it is difficult to harmonise the existing national standards and approval requirements for Class A jointing compounds. One particular point relates to the use of sealant supporting bases (e.g. hemp, flax or synthetic fibres). Whilst these should not be used to fill large gaps between bad fitting threads, in some countries they may be used to ensure that the jointing compound remains in its position on the male thread and is not stripped off during assembly of the joint. It will be up to the manufacturer's handling instructions (and the country of use) whether jointing compounds of Class A will be applied with or without such sealant supporting bases. Supporting bases are not used with Classes B and C jointing compounds.

The adjustment of prefabricated parts of an installation requires sometimes the assembled taper/parallel threaded joints to be turned back up to an angle of 45° . To ensure that jointing compounds fulfil this requirement in countries where such handling techniques are used, an additional requirement concerning the turn back test has been included. Such jointing compounds are additionally designated with "Rp".

1 Scope

This European Standard specifies requirements and test methods for non-hardening sealing materials (hereafter referred to as jointing compounds) suitable for sealing threaded metallic joints such as those specified in ISO 7-1. These jointing compounds are for use in contact with 1st family gases (town gas), 2nd family gases (natural gas) and 3rd family gases (liquefied petroleum gases (LPG) not including LPG in the liquid form) and hot water of heating systems (Class A), in gas appliances and their auxiliary equipment (Class B) as well as in LPG storage (Class C) according to table 1.

Anaerobic jointing compounds are covered by EN 751-1, non-hardening sealing materials in the form of PTFE-tapes are covered by EN 751-3.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 7-1	<i>Pipe threads where pressure-tight joints are made on the threads - Part 1: Dimensions, tolerances and designation</i>
ISO 228-1	<i>Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation</i>
ENISO 2160	<i>Petroleum products - Corrosiveness to copper - Copper strip test (ISO 2160:1985, including Corrigendum 1:1993)</i>
EN 437	<i>Test gases - Test pressures - Appliance categories</i>
EN 10242	<i>Threaded pipe fittings in malleable cast iron</i>
prEN 10255	<i>Carbon steel tubes suitable for welding or threading</i>
prEN 12164	<i>Copper and copper alloys - Rod for free machining purposes</i>

3 Definitions

For the purposes of this European Standard the following definitions apply:

3.1 non-hardening jointing compound (referred to hereafter as jointing compound):
Sealing material applied as liquid, gel, paste (normally without the addition of sealant supporting bases) or as tape of non-woven synthetic fibres impregnated with jointing compound to the threads.