



APPROVAL OF PRODUCTS FOR USE WITH DRINKING WATER

TEST PROTOCOLS FOR DESIGNATED LABORATORIES

**Leaching of substances from products used
in contact with water intended for human
consumption**

Protocol 4 Metallic products.

DOCUMENT CONTROL

The only controlled version of this document can be accessed on the DWI Website – www.dwi.gov.uk/drinking-water-products/index.htm. Printed copies of this document, together with electronic copies held on local computers and other storage devices are uncontrolled.

INTRODUCTION

This test protocol is one of a series prepared by the Drinking Water Inspectorate (DWI) to provide guidance to test laboratories on procedures to be used in evaluating the suitability of products for use in the treatment and distribution of water intended for human consumption. These procedures are designed to ensure a consistent approach to testing by the designated test laboratories.

The protocols currently available are listed below.

Number	Title
0	Designated test laboratory requirements
1	Leaching of substances from products used in contact with water intended for human consumption: Reporting requirements
2	Leaching of substances from products used in contact with water intended for human consumption: General Method
3	Leaching of substances from products used in contact with water intended for human consumption: Cement admixtures and concrete - <i>provisional</i>
4	Leaching of substances from metallic products used in contact with water intended for human consumption: General method
5	Leaching of substances from products used in contact with water intended for human consumption: Water treatment membranes
6	Leaching of substances from non-metallic products used in contact with water intended for human consumption: Filter media and ion exchange resins

IMPACT OF EUROPEAN TECHNICAL REQUIREMENTS

Currently a whole series of test methods are being prepared within CEN in support of the approval of products used with water intended for human consumption. As these are published any conflicting national test protocols will have to be withdrawn. It is currently anticipated that published EN standards will become available for most of the areas covered by these protocols during the next few years. As these are published, the affected protocols will be withdrawn or modified, as appropriate.

AVAILABILITY

Copies of these test protocols, together with information requirements for applicants, can be freely downloaded from our website – <http://www.dwi.gov.uk/drinking-water-products/advice-and-approval/index.htm>

CONTACT

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Revision notes –

Version 2.1 – revisions to reflect new approval processes and requirements; v2.2 – update of regulatory requirements v2.3
Address change; v2.4 change to England and Wales Regulations

GENERAL DEFINITIONS (for use with all Test Protocols)

The relevant regulations (for public drinking water suppliers)

The following regulations apply to the approval of substances and products used in the provision of public water supplies within the United Kingdom:

- a) England - Regulation 31 of The Water Supply (Water Quality) Regulations 2016 (Statutory Instruments 2016 No 614) – <http://www.legislation.gov.uk/ukxi/2016/614/contents/made>
- b) Wales – Regulation 31 of The Water Supply (Water Quality) Regulations 2010 (Welsh Statutory Instrument 2010 No 994 (W.99) - <http://www.legislation.gov.uk/wsi/2010/994/contents/made> (and Amendment Regulations 2016 No. 410 (W. 128))
- c) Scotland – Regulation 33 of The Public Water Supplies (Scotland) Regulations 2014 – <http://www.legislation.gov.uk/ssi/2014/364/contents/made>
- d) Northern Ireland – Regulation 30 of The Water Supply (Water Quality) (Amendment) Regulations (Northern Ireland) 2009 (Statutory Rules of Northern Ireland 2009 No.246) - http://www.opsi.gov.uk/sr/sr2009/nisr_20090246_en_1

Where reference is required to specific regulatory requirements, these are given in footnotes.

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ASSESSMENT OF THE ACCEPTABILITY OF METALLIC CONSTRUCTION PRODUCTS.

Currently the UK has no regulatory test requirements for the effects of metallic pipes and fittings on water quality. Formerly metallic products were eligible for unapproved use in public water supplies, under the traditional use exemption of the Water Supply (Water Quality) Regulations.

Under the requirements of the current relevant regulations, exemption on the basis of traditional use is no longer available. The Drinking Water Inspectorate (DWI) has now published guidance on the implications of this change, including upon the use of some metallic products – <http://www.dwi.gov.uk/drinking-water-products/advice-and-approval/advicesheet8.pdf>.

In 2002 BSI published a Draft for Development (DD256 - Assessment of the potential for metallic materials to affect adversely the quality of water intended for human consumption). This test uses coupons as test samples and may not be applicable to pipes and fittings as placed on the market for supply to the water industry. The DWI has nevertheless used a modification of DD256 to assess leaching rates of metals from specified grades of stainless steel – see Application Form for Stainless Steel products - <http://www.dwi.gov.uk/drinking-water-products/advice-and-approval/forms/StainlessSteel.doc>

A series of test methods for assessing the effects of metallic materials on water quality are currently being developed in CEN – these should be available for use over the next few years, although it is not yet clear how the test results will be handled.

In the meantime applicants seeking approval for metallic products should contact the DWI.

Bibliography

DD 256 : 2002	Assessment of the potential for metallic materials to affect adversely the quality of water intended for human consumption — Specification
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