

# LIST OF APPROVED PRODUCTS for use in Public Water Supply in the United Kingdom

March 2009



guardians of drinking water quality



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Errors and corrections:

Please email us if you find any errors or if corrections are needed

Email: [reg31.enquiries@defra.gsi.gov.uk](mailto:reg31.enquiries@defra.gsi.gov.uk)

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## INTRODUCTION

**The products in this list have only been assessed for safety for use in public water supplies by water undertakers and licensees. They have neither been assessed for fitness for purpose, nor for use in buildings, nor approved for use in buildings; the Water Regulations Advisory Scheme (WRAS) operates a specific approval scheme for products used in buildings - <http://www.wras.co.uk/Directory/>**

Section 69 of the Water Industry Act 1991, as amended by the Water Act 2003, gave the Secretary of State for the Environment, Food and Rural Affairs and the National Assembly for Wales powers to make regulations controlling substances, processes and/or products that are used in the treatment and provision of public water supplies. Section 76B of the Water (Scotland) Act 1980 gives Scottish Ministers similar powers.

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

- a) England - Regulation 31 of The Water Supply (Water Quality) Regulations 2000 (Statutory Instruments 2000 No 3184) – <http://www.dwi.gov.uk/regs/si3184/3184.htm>
- b) Wales – Regulation 31 of The Water Supply (Water Quality) Regulations 2001 (Welsh Statutory Instrument 2001 No 3911 (W.323) – <http://www.opsi.gov.uk/legislation/wales/wsi2001/20013911.htm>
- c) Scotland – Regulation 27 of The Water Supply (Water Quality) (Scotland) Regulations 2001 – <http://www.opsi.gov.uk/legislation/scotland/ssi2001/20010207.htm>
- d) Northern Ireland – Regulation 30 of The Water Supply (Water Quality Regulations) (Northern Ireland) 2007 (Statutory Rules of Northern Ireland 2007 No.147) - <http://www.opsi.gov.uk/sr/sr2007/20070147.htm>

These regulations concern the introduction of substances and products (including construction products) and processes for use in the treatment and provision of public water supplies. They implement the requirements of Article 10 of the European Union Directive 98/83/EC on the quality of water intended for human consumption, in respect to substances and materials used in the preparation and distribution of water up to the point of delivery to premises. They do not transpose the requirements of the Directive with regard to the premises (water supply systems within buildings). In England and Wales these requirements are dealt with by the water industry Water Regulations Advisory Scheme (WRAS) under the Water Supply (Water Fittings) Regulations 1999. In Scotland there are dealt with by Scottish Water's Water Byelaws 2004.

Under these Regulations water undertakers<sup>1</sup> shall not apply or introduce any substance or product into public water supplies unless one of the requirements of this regulation is met. One of these requirements is that the substance or product has been **approved** by the Secretary of State for the Environment, Food and Rural Affairs, the National Assembly for Wales, the Northern Ireland Assembly and Scottish Ministers (collectively referred to as the Authorities).

The Regulations provide that the UK Authorities may, by notice given in writing, require any water undertaker<sup>1</sup> to apply for the approval of the use of any process. **Processes coming under these requirements are NOT included in this publication.** The Drinking Water Inspectorate (DWI) operates the approval system on behalf of the Authorities. DWI accepts

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<sup>1</sup> and combined licensees, see The Water Act 2003 (Consequential and Supplementary Provisions) Regulations 2005

applications for approval of products used both before and at the treatment works, and in water distribution systems up to the point of delivery to premises.

### ***The Approval Process***

An approvals Committee was originally established in 1966 by the (then) Ministry of Housing and Local Government. The Committee's original terms of reference were to consider whether chemicals used in the treatment of public water supplies might present any risk to the health of consumers. The remit was extended to include construction products used in contact with public water supplies. The Committee advised DWI (acting for the Authorities) on approvals under previous Regulations.

The Committee, renamed the Committee on Products and Processes for use in Public Water Supplies (CPP), was set up as an advisory Non-Departmental Public Body (NDPB) in May 1998 and has provided advice, until April 2007, to the UK Authorities under the current regulations.

Applications for approval are now dealt with by the DWI – see Advice Sheet 1 <http://www.dwi.gov.uk/31/pdf/Advicesheet1.pdf>.

When assessing applications for approval, DWI relies on the expertise of its Inspectors and expert advisers who are experienced in toxicology, chemistry, engineering, water treatment, water distribution and public health.

### ***Basis of approval***

When considering an application for approval, DWI considers only whether the use of a substance or product will adversely affect the quality of the water supplied, or cause a risk to the health of consumers. The DWI does not assess fitness for purpose and approval by the Authorities must not be taken as a favourable assessment of the performance or merits of any substance or product.

Applications are considered for all construction products used in contact with water in water treatment processes, water supply pipelines (including raw water pipelines) and drinking and raw water storage installations. In addition DWI considers water treatment chemicals and filtration media that are not covered by a published BS EN standard<sup>2</sup>; products (individual chemicals or filter media) that conform to a BS EN standard may be used without the approval of the Authorities in accordance with any appropriate additional National conditions of use.

**It is important to note that approval of products does not give any indication as to the effectiveness or merits of the products in relation to any use.**

Approved products have not been assessed for suitability for use with regeneration chemicals used in association with some water treatment processes; for such use, specific testing after exposure to the appropriate aggressive chemicals should be undertaken.

**DWI cannot advise on approval of products that will not be placed on the United Kingdom market.**

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<sup>2</sup> See Annex 2.

### ***Products Approved Under Previous Regulations<sup>3</sup>***

Approvals given under what are revoked Regulations are continued in effect by the combination of sections 17(2)(b) and 23 of the Interpretation Act 1978. So far as relevant, the effect of those provisions is that anything (including the approval of a substance or product) done under the previous Regulations that could have been done under present Regulations is taken to have been done under the latter Regulations. For advice on Natural or Traditional products please refer to Advice Sheet 10 - <http://www.dwi.gov.uk/31/pdf/Advicesheet10.pdf>

### ***Review of Approved Products***

**New toxicological information** - From time to time the DWI is made aware of new toxicological information on specific substances, usually from other recognised national or international bodies. DWI will review this information, and where necessary seek expert toxicological advice concerning the impact of this data on currently approved products containing those substances. If it is found that this information indicates that some approved products could pose a potential risk to human health, DWI may require some retesting of them. This process is set out in Advice Sheet 1, Section 7.2 and 9.2 - <http://www.dwi.gov.uk/31/pdf/Advicesheet1.pdf>

**Changes to approved products** - Approval holders are advised to keep changes to a minimum, but it is recognised that sometimes changes are necessary. If the approval holder makes any change to an approved product, this must be notified to DWI as soon as possible so that an assessment of the implications of the change can be made. Major changes may mean that DWI will require further information or testing to determine whether the approval of the product can be maintained. It is for DWI to assess the significance of the change; some minor changes may require no further action. Further details are given in Advice Sheet 4 - <http://www.dwi.gov.uk/31/pdf/Advicesheet4.pdf>

In some cases either of the above could lead to revocation of approval of the product.

**Breaches of any condition of approval would be grounds for revocation of that approval.**

### ***The Annual List of Approved Products***

The relevant Regulations require that a list of all the substances and products approved or refused and all approvals revoked or modified, shall be published, at least once a year.

This list is regularly updated by DWI throughout the year, and includes details of changes to approved products and additions to the List. The list is posted on the DWI website: <http://www.dwi.gov.uk/31/approvedproducts/soslist.shtm> . A list is published annually by the Scottish Government on their website: <http://www.scotland.gov.uk/Publications/>

### **IMPORTANT NOTE**

Please see the DWI website for the most up-to-date list. Printed copies of this list may not be up-to-date.

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<sup>3</sup> Or the 15<sup>th</sup> Statement of the Committee on Chemicals and Materials of Constructions for use in Public Water Supply and Swimming Pools (Department of the Environment) March 1989 – issued before implementation of the previous Regulations.



## INTRODUCTION TO THE LIST OF APPROVED PRODUCTS

***All approved products must be used in accordance with the specific conditions of approval, listed against the product names in Parts A-E. In addition, the following general conditions of approval apply to all approved products:***

- (1) That use is in accordance with an Instructions for Use document. Approval holders must provide water undertakers<sup>4</sup> with copies of the Instructions for Use Document that was considered by the Drinking Water Inspectorate (DWI) when approval was recommended.*
- (2) That the approval of the t Authorities is obtained on condition that there shall be:*
  - no change in the formulation of the approved product, including change in the source or identity of raw materials*
  - no change in the manufacturing process, including location of manufacture*
  - no change in designation of the approved product*
  - no change in name or ownership of the organisation holding the approval*
- (3) That the producer shall ensure that the product is tested for conformity with its formulation, and the source or identity of its raw materials, at such intervals and by such persons, as may be determined by the Authorities. The results of such testing shall be sent to the UK Authorities.*
- (4) If there is suspicion that any of the above is not being followed or has been changed then notify DWI Regulation 31 team who will investigate ([reg31.enquiries@defra.gsi.gov.uk](mailto:reg31.enquiries@defra.gsi.gov.uk))*

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<sup>4</sup> and combined licensees, see The Water Act 2003 (Consequential and Supplementary Provisions) Regulations 2005

## PART A: CHEMICALS AND FILTER MEDIA

### INTRODUCTION

The products listed in this section are for use by water undertakers in connection with public water supplies, and cover :-

- Chemicals that can be used for the treatment and disinfection of water intended for human consumption;
- Chemicals that can be used for the treatment of assets, eg surface disinfection; and
- Filter media used in the large scale filtration of water, but not part of specific units, eg cartridge filters, membrane filtration units etc.

Two series of relevant European Standards (EN) have now been published -

- Chemicals used for treatment of water intended for human consumption
- Products used for treatment of water intended for human consumption

As a consequence of the introduction of these EN standards treatment chemicals or products that conform with an appropriate EN standard, and that are used in accordance with any specific national condition of use (see Annex 2, sections 2.1 and 2.2 respectively) may be used without the approval of the Authorities. These standards are published by the British Standards Institute(BSi) as BS EN Standards and are available through BSi.

**Products that conform to an appropriate EN standard are not subject to the approval process and are no longer listed in this publication.** When new appropriate EN standards are published, products currently listed and conform to the appropriate new EN standard, will be removed from this section and temporarily listed in Annex 1 table 1.6.2.

**The products listed in this section have only been assessed for their safety for use in public water supplies by water undertakers, in accordance with the relevant Instructions for Use. These products have NOT been assessed for –**

- a) their efficacy or fitness for purpose in respect of any use; or
- b) their suitability for use in building water systems, including in terms of their safety when used in such systems.

#### **IMPORTANT NOTE**

**Where a product based on a treatment chemical meeting the requirements of a relevant EN standard also contains other ingredients, whether or not these other ingredients meet the requirements of relevant EN standards, a formal review of the product by DWI is required before use – see Sections 1.4 and 3 of Advice Sheet 3 – <http://www.dwi.gov.uk/31/pdf/Advicesheet3.pdf>**

The following chemicals and products are either, not covered by a relevant EN standard, or do not conform fully to the scope and/or requirements of a published EN. For all of the chemicals and products listed, the following general condition of approval applies:

*It is the responsibility of the water undertaker to ensure that*

*(a) the method and manner of use; and*

*(b) the purity of these chemicals and products*

*are such that, in the case of water for public supply, the water treated meets the requirements of the relevant regulations). Where appropriate, additional specific conditions of approval are listed against the chemical or product.*

## **A.1 FLOCCULANTS AND COAGULANTS**

### **A.1.1 Products based on tannin**

*The dose used must not exceed 10 mg l<sup>-1</sup> of active material.*

#### **GE Betz Ltd**

WS 330/11/2 Klaraid PC 4000

### **A.1.2 Products based on aluminium and iron**

*For these products the dose must not exceed 150 mg l<sup>-1</sup> of the product as supplied.*

#### **Clinty Chemicals Ltd**

DWI 56/4/151 Ferric Aluminium Sulfate

### **A.1.3 Products based on iron**

#### **High Chemicals (UK) Ltd**

DWI 56/4/753 Econofloc 11

DWI 56/4/471 Econofloc 15

### **A.1.4 Products based on polyacrylamide**

*For the products listed below the following conditions apply:-*

- (i) no batch must contain more than 0.025% of free acrylamide monomer based on the active polymer content*
- (ii) the dose must average no more than 0.25mg/l and never exceed 0.50 mg/l of the active polymer*
- (iii) an upper limit for the content of free acrylamide monomer must be stated by the supplier for every batch*
- (iv) the method used for the analysis for free acrylamide monomer is that published in the series "Methods for the Examination of Waters and Associated Materials" entitled "Determination of Acrylamide Monomer in Waters and Polymers 1987" (HMSO 1988)Method number 115. ISBN 01175 2039X*

#### **Ciba UK plc**

DWI 56/4/885 Magnafloc LT20

DWI 56/4/883 Magnafloc LT22-DWI

DWI 56/4/884 Magnafloc LT22S-DWI

DWI 56/4/886 Magnafloc LT25

DWI 56/4/887 Magnafloc LT27

#### **Kemira Chemicals b.v**

DWI 56/4/893 Superfloc A100 PWG

DWI 56/4/894 Superfloc A110 PWG

DWI 56/4/895 Superfloc A120 PWG

DWI 56/4/896 Superfloc A130 PWG

DWI 56/4/897 Superfloc A137 PWG

DWI 56/4/898 Superfloc A150 PWG

DWI 56/4/899 Superfloc C-492 PWG

DWI 56/4/900 Superfloc N100 PWG

DWI 56/4/901 Superfloc N300 PWG

## A.1.5 Products based on polyamine

For the products listed below the following conditions apply:-

- (i) the dose must average no more than 2.5 mg/l and never exceed 5.0 mg/l as the active polymer
- (ii) no batch must contain more than 40 mg/kg 3-monochloro propane 1,2-diol
- (iii) the analytical system used for determining the batch content must have a limit of detection no greater than 4mg/kg. Both estimates must have at least 10 degrees of freedom and have been determined from batches of analyses carried out on not less than five separate days
- (iv) the supplier must state for every batch an upper limit for the content of 3-monochloro propane 1,2-diol

### Ciba UK plc

DWI 56/4/888 Magnafloc LT31

DWI 56/4/889 Magnafloc LT32

### Kemira Chemicals b.v

DWI 56/4/902 Superfloc C573

### Nalco Europe b.v

DWI 56/4/905 <sup>1</sup>Nalco 71223

DWI 56/4/906 <sup>1</sup>Nalco 71225

<sup>1</sup> indicates products which also contain a coagulant based on aluminium

## A.1.6 Products based on polyDADMAC (Polydiallyldimethyl ammonium chloride)

For the products listed below the following conditions apply:-

- (i) the dose must not exceed 10 mg/l of active polymer

### Ciba UK plc

DWI 56/4/890 Magnafloc LT35

DWI 56/4/891 Magnafloc LT37

DWI 56/4/892 Magnafloc LT38

### Kemira Chemicals b.v

DWI 56/4/903 Superfloc C587

DWI 56/4/904 Superfloc C592

## A.2 ADSORBENTS

The contact bed containing the product must be adequately backwashed in accordance with the Instructions for Use document and then rinsed with 5 bed volumes of water passed downflow to waste.

### GEH Wasserchemie GmbH

DWI 56/4/378 GEH ferric hydroxide

### Lanxess Deutschland GmbH

DWI 56/4/496 Bayoxide E 33P

**Purolite International Ltd**  
DWI 56/4/421 [Macronet - MN200](#)

## ***A.3 ION EXCHANGE RESINS SYSTEMS***

### **A.3.1 Ion exchange resins**

**Orica UK Ltd - Watercare Europe**  
DWI 56/4/550 [MIEX DOC Resin](#)

**Purolite International Ltd**  
DWI 56/4/63 [Purolite A520E nitrate selective anion exchange resin](#)

**Rohm and Haas (UK) Ltd**  
DWI 56/4/758 [AMBERLITE PWA5](#)  
DWI 56/4/63 [IMAC HP 336](#)  
DWI 56/4/63 [IMAC HP 555](#)

### **A.3.2 Ion exchange resin based processes**

**BOC**  
DWI 56/4/467 [IXL Process](#)

## ***A.4 DISINFESTATION, DISINFECTION OR CLEANING AGENTS OF WATERWORKS APPARATUS AND DISTRIBUTION SYSTEMS***

During the approval process there is no evaluation of a product's effectiveness, only of its safety in use. An approval given in this publication does not certify that the UK Authorities are satisfied that the product is effective, but only that it is safe for use in accordance with the Instructions for Use supplied.

**The fact that a product is approved does not justify any claim about its effectiveness.**

*Permission or consent for disposal of any wastewater generated to a sewer or watercourse must be obtained from the relevant water Service Company, or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland as appropriate.*

**Aquabiotics Pty Ltd**  
DWI 56/4/642 [BoreSaver Liquid](#)  
DWI 56/4/641 [BoreSaver Ultra C](#)

**Carus Chemical Company**  
DWI 56/4/631 [Carusol 20 Liquid Permanganates](#)  
DWI 56/4/631 [Carusol 40 Liquid Permanganates](#)

**EPSCO Ltd**  
WS 34/1/144 [Carela Bio-Des](#)  
WS 34/1/144 [Carela Bio-Plus](#)  
DWI 56/4/437 [Carela Bio-Plusforte](#)  
DWI 56/4/578 [Carela Novopur](#)  
DWI 56/4/380 [Carela RS 100](#)

**Floran Technologies Inc**DWI 56/4/754 [Floran Biogrowth Remover/Floran Catalyst](#)DWI 56/4/754 [Media Master/Floran Catalyst](#)**Panton McLeod Ltd**DWI 56/4/212 [PM33](#)DWI 56/4/212 [PM55](#)DWI 56/4/212 [PM88](#)**Permacare - Membrane Separations Group**DWI 56/4/385 [Resintreat](#)**R. Spane GmbH**DWI 56/4/730 [Carela FIX & DES](#)**Tevan BV**DWI 56/4/844 [TEVAN Panox](#)

For this product the following applies:

*This product shall be rinsed until the concentration of Hydrogen Peroxide is 0.1mg/l or less.*

For the following products the following conditions apply:

*Current approval for the use of products containing silver salts in relation to emergency disinfection of water intended for human consumption is subject to the following conditions of approval:*

- *the concentration of silver in the water does not exceed 80 µg l<sup>-1</sup>; **and***
- *consumers are exposed to water containing silver for only as long as necessary to restore conventional treatment, and for no more than a total of 90 days in any period of a year.*

*These conditions ensure that there is only a limited exposure of the consumer to silver.*

**ROAM Chemie NV**DWI 56/4/573 [Huwa-San TR50](#)**Tevan BV**DWI 56/4/381 [TEVAN SIL](#)**Water Treatment Products Ltd**DWI 56/4/211 [Sanosil Super 25](#)

## ***A.5 DISINFECTION OR CLEANING AGENTS OF MEMBRANES***

During the approval process there is no evaluation of a product's effectiveness, only of its safety in use. An approval given in this publication does not certify that the Authorities are satisfied that the product is effective, but only that it is safe for use in accordance with the Instructions for Use supplied.

**The fact that a product is approved does not justify any claim about its effectiveness.**

### **Ashland Drew Industrial Division**

DWI 56/4/473 [AmeROyal 363](#)

### **Atkinson Chemicals Ltd**

DWI 56/4/495 [Kinro 1020](#)

DWI 56/4/495 [Kinro 1020D](#)

DWI 56/4/524 [Kinro 1406](#)

DWI 56/4/524 [Kinro 1406N](#)

DWI 56/4/375 [Kintrol 556](#)

DWI 56/4/375 [Kintrol 556C](#)

### **Avista Technologies (UK) Ltd**

DWI 56/4/458 [Delro 35](#)

DWI 56/4/582 [Delro 40](#)

DWI 56/4/737 [RoClean 111](#)

DWI 56/4/870 [RoClean L403](#)

DWI 56/4/800 [RoClean L404](#)

DWI 56/4/824 [RoClean L607](#)

DWI 56/4/746 [RoClean P303](#)

DWI 56/4/868 [Vitec 2000](#)

DWI 56/4/457 [Vitec 3000](#)

DWI 56/4/582 [Vitec 4000](#)

DWI 56/4/458 [Vitec 5000](#)

DWI 56/4/801 [Vitec 7000](#)

DWI 56/4/869 [Vitec 7000a](#)

### **GE Betz Ltd**

DWI 56/4/388 [Hypersperse MDC150](#)

DWI 56/4/388 [Hypersperse MDC220](#)

### **Genesys International Ltd**

DWI 56/4/664 [Genesol 38](#)

DWI 56/4/665 [Genesol 40](#)

DWI 56/4/577 [Genesys HR](#)

DWI 56/4/495 [Genesys LF](#)

DWI 56/4/783 [Genesys LF60](#)

DWI 56/4/781 [Genesys LS](#)

DWI 56/4/610 [Genesys MG](#)

DWI 56/4/593 [Genesys SI](#)

DWI 56/4/524 [Genesys SW](#)

**Gulf Specialized Water Services Company**

DWI 56/4/534 GulfChem GS300  
DWI 56/4/534 GulfChem GS500  
DWI 56/4/534 GulfChem GS510  
DWI 56/4/534 GulfChem GS520  
DWI 56/4/534 GulfChem GS530

**Permacare - Membrane Separations Group**

DWI 56/4/326 Permaclean 77  
DWI 56/4/326 Permaclean 99  
DWI 56/4/463 PermaTreat 191  
DWI 56/4/385 Resintreat

**Rohm and Haas (UK) Ltd**

DWI 56/4/481 Acumer 1100  
DWI 56/4/481 Acumer 4035  
DWI 56/4/481 Acumer 4450  
DWI 56/4/481 Acumer 4800

**Water Treatment Products Ltd**

DWI 56/4/821 WTP RO 411  
DWI 56/4/822 WTP RO 413

***A.6 DISINFECTANTS FOR EMERGENCY USE***

Disinfectants for emergency use are no longer approved and listed under the requirements of Regulation 31(4)(a). Guidance upon the choice and use of disinfectants in an emergency is provided in Advice Sheet 9 (<http://www.dwi.gov.uk/31/pdf/Advicesheet9.pdf>).

Approvals of previously listed disinfectants for emergency use have been revoked – see Information Letter 08/2008 (<http://www.dwi.gov.uk/regs/infolett/2008/info0808.shtm>)



## **A.7 PRODUCTS BASED ON TRADITIONAL CHEMICALS**

### **A.7.1 Traditional Chemicals**

The following traditional chemicals (not covered by a specific BS EN) are considered by DWI to be unobjectionable on health grounds for the treatment of water.

For products in this section the following general condition applies:

*The method of use and the purity of these products shall be such that, in the case of water for public supply, the water so treated meets the requirements of the relevant Regulations.*

Calcium chloride

Calcium sulphate

Citric acid (food grade) - for use only in cleaning of membranes

Crushed flint (e.g. Flintag)

Ferrous chloride

Magnesium carbonate

Magnesium hydroxide

Magnesium oxide

Magnesium sulphate - use only for re-mineralisation with RO membrane systems

Magnetite (Iron oxide (Fe<sub>3</sub>O<sub>4</sub>))

Products supplied as mixture of magnesium hydroxide and magnesium oxide

Sodium chloride

Sodium sulphate

### **A.7.2 On-site electrolytic generation of chlorine (OSEC)**

Products in this section are not fully covered by EN 901 and must conform to the following conditions of use:

*(i) the method of use and the purity of the output of these products shall be such that, in the case of water for public supply, the water so treated meets the requirements of the relevant Regulations, and*

*(ii) the treated water must not contain more than 700 µg/l chlorate.*

#### **Aztec Environmental Controls**

WS 34/1/82 Sodium hypochlorite generated by the ElectroCell Process

#### **Proton Water Services Ltd**

DWI 56/4/717 PRO-SEC System

DWI 56/4/864 Selcoperm

#### **Severn Trent Services Ltd**

DWI 56/4/549 Clortec cell

#### **Wallace and Tiernan Ltd**

DWI 56/4/775 Sodium hypochlorite generated by the OSEC system

#### **Waterman Environmental Services Ltd**

DWI 56/4/545 MIOX Electrolytic Sodium Hypochlorite Generators

## **A.8 DISINFESTATION AGENTS**

During the approval process there is no evaluation of a product's effectiveness, only of its safety in use. An approval given in this publication does not certify that the Authorities are satisfied that the product is effective, but only that it is safe for use in accordance with the Instructions for Use supplied.

**The fact that a product is approved does not justify any claim about its effectiveness.**

### **Bournemouth and West Hampshire Water Plc**

DWI 56/4/720 [Permasect WT for use in disinfection of mains](#)

For this product the following conditions apply:

- (i) the dose applied must not cause the average and maximum concentration of permethrin or pyrethrins in water to exceed 10 and 20  $\mu\text{g l}^{-1}$  respectively;*
- (ii) the period of dosing should be kept to a minimum and must never exceed 7 days;*
- (iii) adequate account shall be taken of those water uses likely to be affected by the presence of permethrin or pyrethrins in water;*
- (iv) any water company proposing to use the product must give prior notification to the Authorities in accordance with agreed procedures; and*
- (v) permission or consent for disposal of any wastewater generated to a sewer or water course must be obtained from the relevant water service company or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland, as appropriate.*

DWI 56/4/720 [Permasect WT for use in application to slow sand filters](#)

For this product the following conditions apply:

- (i) the dose must not exceed 100 $\mu\text{g/l}$  and the residual must not exceed 0.1 $\mu\text{g/l}$  in the treated water;*
- (ii) the period of dosing should be kept to a minimum and must never exceed more than once in a 28 day period;*
- (iii) prior to dosing, the water undertaker must establish that the filter bed to be dosed is intact and free from defects that would permit short-circuiting of normal flow pattern;*
- (iv) monitoring of permethrin in the final treated water entering supply must be carried out at daily intervals during the first 7 days following commencement of dosing; and*
- (v) permission or consent for disposal of any wastewater generated to a sewer or water course must be obtained from the relevant water service company or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland, as appropriate.*

## **A.9 OTHER CHEMICALS**

### **Lithium Salts**

For this product the following condition applies:

*The use of lithium salts for meter calibration in water mains is acceptable providing that the maximum concentration of lithium in water supplied to consumers does not exceed 0.10  $\text{mg l}^{-1}$  at any time (the analytical method used for lithium determination should have an accuracy better than  $\pm 0.01 \text{ mg l}^{-1}$  at 0.10  $\text{mg l}^{-1}$ )*

### **Singleton Birch Ltd**

For these products the following condition applies:

*The final water should not exceed 1 NTU (NTU=nephelometric turbidity unit)*

DWI 56/4/518 [Hydrogel 20](#)

DWI 56/4/518 [Hydrogel 30](#)

DWI 56/4/518 [Hydrogel 50](#)

## ***A.10 FILTER MEDIA***

**Dryden Aqua Ltd**

DWI 56/4/382 [Advance Filtration Media \(AFM\)](#)

## **PART B: PRODUCTS USED FOR THE CONVEYANCE OF WATER**

### ***B.1 PIPES***

#### **B.1.1 Polyethylene (PE) pipes**

##### **Asset International Ltd**

DWI 56/4/513 Weholite Pipe

##### **Dyka B.V.**

DWI 56/4/535 Dyka Blue HDPE -100 Pressure Pipes

DWI 56/4/535 Dyka Blue HDPE -80 Pressure Pipes

##### **Dyka Plastics NV**

DWI 56/4/575 Dyka Blue PE80 Pressure Pipes

##### **EBERO Pipe Systems Ltd**

DWI 56/4/829 Gerodur PE100 Blue Polyethylene Pipe

##### **Egeplast Werner Strumann GmbH &Co**

DWI 56/4/436 Egelen PE 100 Blue

##### **Fusion Provida**

DWI 56/4/545 Fusion Black 100

##### **GPS**

DWI 56/4/366 GPS B Black PE100 Pipe

DWI 56/4/345 GPS B Black Polyethylene Pipe

DWI 56/4/242 GPS B Light Blue Polyethylene Pipe

DWI 56/4/242 GPS B Polyethylene Pipe

DWI 56/4/871 GPS Excel 3c (Black)

DWI 56/4/853 GPS Excel 3c (Blue)

DWI 56/4/544 GPS F Black PE100

DWI 56/4/554 GPS F Blue PE100 Pipe

DWI 56/4/242 GPS F Blue Polyethylene Pipe

DWI 56/4/672 GPS N Black PE100 Pipe

DWI 56/4/670 GPS N Blue PE 100 Pipe

DWI 56/4/751 GPS N Blue PE 80 Pipe

DWI 56/4/798 GPS S Black PE 100 Pipe Type N3000

DWI 56/4/366 GPS S Black PE Pipe

DWI 56/4/370 GPS S Black PE100 Pipe

DWI 56/4/242 GPS S Dark Blue Polyethylene Pipe

##### **Hepworth Building Products**

DWI 56/4 239 Black MDPE Pipe

DWI 56/4/239 Blue MDPE Pipe

##### **KWH Pipe (UK) Ltd**

DWI 56/4/551 KWH Hostalen CRP 100 Black

DWI 56/4/551 KWH Hostalen CRP100 Blue

**NKT Flexibles**

DWI 56/4/644 AQFLEX

**Pipelife Norge AS**

DWI 56/4/811 Pipelife PE100 Pipes Black

DWI 56/4/778 Pipelife PE100 pipes Blue

**Polypipe (Ulster) Ltd**

DWI 56/4/241 Polypipe MDPE Pipe

**Polypipe Building Products Ltd**

DWI 56/4/635 Polypipe HDPE Pipe

DWI 56/4/635 Polypipe MDPE Pipe

DWI 56/4/635 TUB121

DWI 56/4/635 TUB124

**Quality Plastics Ltd**

DWI 56/4/240 Qualplast Polyethylene Pipe

**Radius Systems Ltd**

DWI 56/4/261 Radius 001

DWI 56/4/503 Radius 002

DWI 56/4/521 Radius 004

DWI 56/4/502 Radius 005

DWI 56/4/158 Radius 006

DWI 56/4/349 Radius 008

DWI 56/4/539 Radius 009

DWI 56/4/439 Radius 010

DWI 56/4/774 Radius 011

DWI 56/4/439 Radius 013

DWI 56/4/261 Radius 014

DWI 56/4/349 Radius 015

DWI 56/4/504 Radius 016

DWI 56/4/506 Radius 017

**Simona UK Ltd**

DWI 56/4/526 Simona PE100 Pressure Pipe (type TRST RO) blue

DWI 56/4/570 Simona PE100 SPS-Drinking Water Pipes (type TRST-SPC RO)

DWI 56/4/875 Simona PE100 Black pipe, manufactured using Hostalen CRP100 black

**Subterra - a division of Daniel Contractors Ltd**

DWI 56/4/461 Subcoil

**Wavin Plastics Ltd**

DWI 56/4/244 SupaSure Polyethylene Pipe

DWI 56/4/478 Wavin TS

DWI 56/4/489 Wavin TS3

DWI 56/4/379 WavinBlack Pipe

DWI 56/4/379 WavinJet Pipe

DWI 56/4/244 WavinSure Polyethylene Pipe

## B.1.2 Barrier and laminated pipes

### Egeplast Werner Strumann GmbH & Co

DWI 56/4/589 Barrier pipes egeplast SLA 2.0  
DWI 56/4/589 Laminated pipes egeplast SLM 2.0

### GPS

DWI 56/4/339 GPS Protecta-Line  
DWI 56/4 872 GPS Protecta-Line PE100  
DWI 56/4/676 GPS Secura-Line Pipe Type B  
DWI 56/4/671 GPS Secura-Line Pipe Type N  
DWI 56/4/675 GPS Secura-Line Pipe Type S

### Polypipe Building Products Ltd

DWI 56/4/857 Polyguard: Polyethylene/Aluminium/Polyethylene barrier pipes

### Radius Systems Ltd

DWI 56/4/508 Puriton (BPRB)  
DWI 56/4/780 Radius 003  
DWI 56/4/528 Radius 007  
DWI 56/4/492 Radius 012

### Wavin Plastics Ltd

DWI 56/4/474 Trigon

## B.1.3 Polyvinylchloride (PVC) pipes

Please note that all approved PVC pipes are made with non-lead stabilisers.

### Dyka (UK) Ltd

DWI 56/4/374 Dyka BiOroc Pipe

### Dyka B.V.

DWI 56/4/637 Dyka Grey PVC-U Pipe NGS

### Hepworth Building Products

DWI 56/4/556 Hepworth PVC-A Hep30 (blue) - 16 mm to 710 mm  
DWI 56/4/556 Hepworth PVC-U Watermain (grey) - 3/8th to 24 inches

### Uponor Ltd

DWI 56/4/325 Mondial MOPVC pipe  
DWI 56/4/658 Mondial PVC-O (NGS) Polyvinyl Chloride Pipe  
DWI 56/4/810 Mondial PVC-O (GS2) Molecular Oriented Polyvinyl Chloride Pipe  
DWI 56/4/723 Uponor A-Tech (PVC-A) Pipe

### Wavin Ireland Ltd

DWI 56/4/600 Aquaforce (with non-lead stabiliser)  
DWI 56/4/731 Wavinmain EN 1452 NGS

### Wavin Plastics Ltd

DWI 56/4/581 Wavin Apollo (with Calcium Zinc Stabilisation)

## **B.1.4 Acrylonitrile-butadiene-styrene copolymer (ABS)**

### **Durapipe UK**

WS 330/181 Durapipe ABS Pipe  
DWI 56/4/590 Durapipe ABS Pipe Type F

### **George Fischer Sales Ltd**

DWI 56/4/753 GF ABS pressure pipe

## **B.1.5 Polyethylene terephthalate (PET)**

### **Wavin Plastics Ltd**

DWI 56/4/435 Neofit

## **B.1.6 Glass reinforced plastic (GRP) pipes**

### **Future Pipe Industries B.V.**

DWI 56/4/656 Wavistrong Series - for use upstream of a Reverse Osmosis unit only

### **Iniziative Industriali SpA (Sarplast)**

DWI 56/4/666 Plastiwind - for use upstream of a Reverse Osmosis unit only

## **B.1.7 Cement mortar lined pipes**

For Products in this section, the following conditions applies:

*Before connection to the supply, the water undertaker or their appointed agent, must carry out tests to establish that migration from the cement mortar lining will not cause a contravention of the upper prescribed concentration for hydrogen ion in the relevant Regulations.*

### **B.1.7.1 Cement Mortar Lined Pipes without seal coat**

#### **Frazer & Tabberer Ltd**

DWI 56/4/713 FT Pipelines Cement Lined Pipes

#### **Fuchs Rohr GmbH**

DWI 56/4/434 CSP Water Pipes

#### **Saint-Gobain Pipelines plc**

DWI 56/4/283 Saint-Gobain Pipelines "System CL"

#### **Sertubi**

DWI 56/4/493 Sertubi Ductile Iron Pipe with Internal Lining in Blast Furnac Cement Mortar

### **B.1.7.2 Cement Mortar Lined Pipes with seal coat**

#### **Buderus Giesserei Wetzlar GmbH**

DWI 56/4/625 Cement Mortar Lining coated with Hunting Waterline sealcoat

#### **Electrosteel Castings Ltd**

DWI 56/4/537 Electrofresh Plus Pipe lined with Copon Hycote 162 PWX

**Frazer & Tabberer Ltd**

DWI 56/4/559 CSP water pipe lined with Copon Hycote 162 PWX

**Saint-Gobain Pipelines plc**

DWI 56/4/283 Saint-Gobain Pipelines System XL

**B.1.8 Pipes coated with factory applied nylon resin****Leyfos Plastics Limited**

DWI 56/4/615 Rilsan Nylon Green Coated Pipes and Fittings

**B.1.9 Pipes coated with factory applied epoxy resin****Barnard Ltd**

DWI 56/4/710 Pipes lined with RESICOAT R4-FB HKC71R

DWI 56/4/601 Pipes lined with Scotchkote 206N

**Barrier Limited**

DWI 56/4/757 Barrier Pipeline lined with Copon Hycote 162 PWX

**BSR Pipeline Services Ltd**

DWI 56/4/661 BSR/EPW/003 - Pipegard P300

DWI 56/4/772 BSR/EPW/004 - Copon Hycote PWX

**Conline Coatings B.V.**

DWI 56/4/749 Conline Coatings Pipes lined with Copon Hycote 162 PWX

**Freeflow Pipesystems**

DWI 56/4/601 Pipes Lined with Scotchkote 206N

DWI 56/4/817 Pipes Lined with Resicoat R4-FB HKC71R

**Noksel Steel Pipe Co Inc**

DWI 56/4/832 Steel pipes coated with Copon Hycote 162PWX

**Northpoint Ltd**

DWI 56/4/602 Pipes lined with Scotchkote 206N

DWI 56/4/659 Pipes lined with Resicoat R4-FB HKCO4R

**Orrmac Coatings Limited**

DWI 56/4/771 Pipes and Fittings lined with Resicoat R4-FB HKC71R

**Pipeline Protection Services Ltd**

DWI 56/4/605 Pipes lined with Copon Hycote 162 PWX

**Plastic Coatings Ltd**

DWI 56/4/606 Pipes lined with Scotchkote 206N

**Saint-Gobain Pipelines plc**

DWI 56/4/618 Saint-Gobain Pipelines PaM Natural Pipeline Components



## **B.1.10 Stainless steel pipes**

### **ABC Stainless Ltd**

DWI 56/4/542 Q Pipe System

### **AJ Engineering & Construction Services Ltd**

DWI 56/4/561 AJE Stainless Steel Pipe Systems

### **Alpha Plus Ltd**

DWI 56/4/692 Stainless Steel Pipework

### **Amari Metals Ltd**

DWI 56/4/738 AAlco Stainless Steel Tubes

### **ASD Metal Services**

DWI 56/4/876 ASD Stainless Steel tubes and pipes

### **Damstahl Stainless Ltd**

DWI 56/4/715 Damstahl FF

DWI 56/4/715 Damstahl PT

DWI 56/4/719 Damstahl SE

DWI 56/4/719 Damstahl SP

### **DH Stainless Ltd**

DWI 56/4/773 Stainless Steel Metric Bore and ANSI welded Pipes

### **Dustacco Engineering Ltd**

DWI 56/4/647 DE Stainless Steel Systems

### **Gallagher & McKinney Ltd**

DWI 56/4/616 Stainless Steel Pipe & Fittings grades

### **GB Filters Ltd**

DWI 56/4/820 Aries Managed Air System

### **George Green (Keighley) Ltd**

DWI 56/4/699 Stainless Steel Pipework & Fittings - Flanged/Screwed - All diameters & Grades

### **J.K. Fabrications Limited**

DWI 56/4/574 JKF 304 and 316 Stainless Steel Pipelines

### **Lancashire Fittings Ltd**

DWI 56/4/523 Lancashire Fittings Stainless Steel Pipe

DWI 56/4/523 Lancashire Fittings Stainless Steel Tube

### **L.E.S Engineering Ltd**

DWI 56/4/830 Pipework / Tanks / Vessels

### **MMP Fabrications Ltd**

DWI 56/4/759 Stainless Steel Pipework

### **Outokumpu Stainless Ltd**

DWI 56/4/516 Outokumpu Stainless Steel Pipes

#### **Powerrun Project Management Ltd**

DWI 56/4/782 Powerrun Fabricated 304L Stainless Steel Pipework

DWI 56/4/769 Powerrun fabricated stainless steel pipework

#### **Sandvik Materials Technology Ltd**

DWI 56/4/704 Sandvik 3R12

DWI 56/4/704 Sandvik 3R60

DWI 56/4/704 Sandvik 3R64

DWI 56/4/704 Sandvik 3R65

DWI 56/4/704 Sandvik 3R66

DWI 56/4/704 Sandvik SAF2205

DWI 56/4/704 Sandvik SAF2507

#### **Scottish Water Solutions**

DWI 56/4/722 Stainless Steel Borehole Riser Pipework

#### **Stainless Metric Stock Ltd**

DWI 56/4/569 Stainless Metric Stock - SMS100

#### **Staptina Engineering Services Ltd**

DWI 56/4/567 Staptina 316L Pipework

#### **Vexamus Water Ltd**

DWI 56/4/726 304 Stainless Steel Thin Wall Pipework 50NB to 1000NB

DWI 56/4/727 316 Stainless Steel Thin Wall Pipework 50NB to 1000NB

#### **Weir Materials & Foundries**

DWI 56/4/652 ZERON 100 super duplex stainless steel pipe work and components

#### **Wolseley UK Ltd**

DWI 56/4/819 Wolseley Stainless Steel Pipes and Tubes

### **B.1.11 Coated pipes suitable for total immersion in water**

#### **Saint-Gobain Pipelines plc**

DWI 56/4/604 Saint-Gobain Pipelines System XL

For the following product, the following condition applies:

*Before connection to the supply, the water undertaker or their appointed agent, must carry out tests to establish that migration from the cement mortar lining will not cause a contravention of the upper prescribed concentration for hydrogen ion in the relevant Regulations .*

DWI 56/4/604 Saint-Gobain Pipelines "System CL"

### **B.1.12 Pipes coated with a factory applied Polyolefin**

#### **Saint-Gobain Pipelines plc**

DWI 56/4/823 Blutop

## **B.2 PRODUCTS FOR EMERGENCY USE**

For products in this section the following condition applies:

*These products are primarily intended for emergency use and are approved for limited use only and may not be permanently installed in, or used in conjunction with any system for treating or distributing public water supplies. If the proposed use will extend beyond a 90 day period of use on any one occasion, then advice from the DWI should be sought before installation and use.*

NOTE: some of these products may be suitable for limited use during planned maintenance. In this case it is the responsibility of the water supplier to undertake a thorough risk assessment of the proposed use, including fitness-for-purpose and why other products, already fully approved under Regulation 31(4)(a) in England and Wales or Regulation 27 (4)(a) in Scotland or Regulation 30 in Northern Ireland 2007 cannot be used. Use of any of these products during planned maintenance shall be in accordance with the condition set out above.

### **B.2.1 Hoses**

#### **Snap-Tite Europe. B.V.**

DWI 56/4/62 [Layflat Emergency Hose - Type 122](#)

### **B.2.2 Bowsers/tanks**

#### **JFC Manufacturing (Europe) Ltd**

DWI 56/4/765 [Emergency Water Tank](#)

#### **Kingspan Environmental Containers**

DWI 56/4/736 [Emergency Potable Water Storage Tanks](#)

#### **Trailer Engineering**

DWI 56/4/707 [Emergency Drinking Water Bowsers](#)

#### **Western**

DWI 56/4/825 [Aquistax and Polytank](#)

[Emergency bowsers/tanks](#)

DWI 56/4/693 [Mobile bowsers/tanks](#)

#### **Whale Tankers Ltd**

DWI 56/4/694 [Medium Capacity Whale Drinking Water Bowser](#)

DWI 56/4/662 [Whale Drinking Water Bowser](#)

### **B.2.3 Liner bag**

#### **Arlington Packaging (Rental) Ltd**

DWI 56/4/796 [Arlington 1000 Litre Bag-in-Box Combo Liner](#)

#### **Rapak**

DWI 56/4/849 [1100LLA956](#)

### **B.2.4 Treatment Chemicals**

Treatment chemicals for use in emergencies are listed in section A.6

## **PART C: LINING /COATINGS AND SEALANT & REPAIR MATERIALS**

### **C.1 IN-SITU INSTALLED (TUBULAR) PIPE LININGS**

**Angus Fire Armour Ltd**  
DWI 56/4/45 Thermopipe

### **C.2 IN-SITU APPLIED PIPE COATINGS**

*In-situ applied lining products approved for use by the Authorities in the UK must be applied in accordance with strict operational requirements as documented in the Water Industry Information & Guidance Note IGN 4-02-02 <http://www.wis-ign.org/downloads/IGN%204-02-02.pdf> "Code of Practice: In-situ resin lining of water mains" and the Water Industry Specification WIS 4-02-01 <http://www.wis-ign.org/downloads/WIS%204-02-01.pdf> "Operational Requirements: In situ resin lining of water mains".*

*Thus from 1 April 2007 all water undertakers shall apply coatings in accordance with the Operational Requirement in order to comply with the relevant Regulations . The following conditions replaced the previous specific conditions:*

- *All water undertakers and contractors must apply the coating in accordance with: WIS 4-02-01 "In-situ resin lining of water mains" published by Water UK Standards Board.*
- *Coatings must be applied by an approved contractor, listed for the purposes of coating water supply pipes in the Authorities' List of Approved Products (this publication), or, from December 2007, in any subsequent listings produced on behalf of Water UK.*
- *The approved product must be manufactured and applied under the effective control of a BS EN ISO9000 Quality System and approved by a third party certification organisation.*

*UKAS is expected to be responsible, on behalf of Water UK, for Accreditation of Water UK Nominated Certifying Bodies and Nominated Training Certifiers. DWI Nominated Certifying Bodies and Training Providers have until 31 December 2007 to obtain the new accreditation.*

*The List of Approved Products no longer includes the list of the lining contractors who have been approved (under the previous DWI arrangement) by each of the appointed organisations and have achieved full third party certification.*

#### **C.2.1 Coatings based on epoxy resins**

These products must be applied by a certified contractor.

**3M E Wood Ltd**  
DWI 56/4/300 Scotchkote 162 PWX  
DWI 56/4/760 Geopox GX 014

**Leighs Paints**  
DWI 56/4/253 Pipegard P300

**Subterra - a division of Daniels Contractors Ltd**  
WS 34/1/124 ELC 173/90

## C.2.2 Coatings based on polyurethane

These products must be applied by a certified contractor.

### **3M E Wood Ltd**

DWI 56/4/336 [Scotchkote 169](#)

DWI 56/4/657 [Scotchkote 169HB](#)

DWI 56/4/645 [Scotchkote 169LV](#)

### **Subterra - a division of Daniels Contractors Ltd**

DWI 56/4/579 [Fast-Line](#)

DWI 56/4/698 [Fast-Line plus](#)

## C.3 SITE APPLIED COATINGS FOR WATER RETAINING STRUCTURES

*The products listed below in this section, in addition to being approved for site applied coatings for water retaining structures, are suitable for use in large diameter mains where they can be applied by hand e.g. brush or spray.*

*The coatings listed in this section have been subject to review by DWI (including testing), on the basis of their proposed use with inert substrates such as metallic or cement based structures, and upon the detailed application and curing requirements set out in the manufacturer's Instructions for Use document. They have not been evaluated for any other aspect, such as fitness for purpose.*

*For use with non-metallic non-cementitious materials, such as plastics and rubbers, a specific application for approval would be required for use of the coating with a specific substrate.*

## C.3.1 Coatings based on epoxy resins

The following conditions apply unless otherwise indicated:

- (i) the minimum cure time is 16 hours; and
- (ii) the minimum cure temperature is 3°C.

### **Corroless Corrosion Control**

DWI 56/4/305 [Corroguard 595](#)

### **3M E Wood Ltd**

DWI 56/4/669 [Cupon Hycote 160PW \(Activator L0120\)](#)

DWI 56/4/759 [Cupon Hycote 162 PW](#)

*The above product is also suitable for brush application of large diameter mains pipes when used in conjunction with the IFU associated to this product.*

DWI 56/4/300 [Cupon Hycote 162PWX](#)

DWI 56/4/760 [Geopox GX014](#)

### **Leighs Paints**

DWI 56/4/253 [Leighs Waterline P300](#)

DWI 56/4/253 [Pipegard P300](#)

### **Sika Ltd**

DWI 56/4/197 [Sikagard 62](#)

For this product the following condition applies:

*The product must be cured in accordance with the cure curves provided in the Instructions for Use. The required cure time can be calculated by the user from the minimum daily temperature at the site of application. If the temperature cannot be measured and recorded then a minimum cure period of 21 days must be used.*

### **Subterra - a division of Daniels Contractors Ltd**

DWI 56/4/71 [ELC 173/90](#)

## **C.3.2 Coatings based on polyurethane**

### **3M E Wood Ltd**

DWI 56/4/619 [Copon Hycote 165 PW](#)

For this product the following condition applies: *The product must be cured for a minimum period of 7 days at a minimum temperature of 7° C.*

DWI 56/4/613 [Copon Hycote 165 PW-PR](#)

For this product the following condition applies: *The product must be cured for a minimum period of 7 days at a minimum temperature of 7° C.*

### **ITW Irathane International**

DWI 56/4/276 [Aqualine 650 with Irabond BC50](#)

For this product the following condition applies: *The product must be cured for a minimum of 21 days at a minimum temperature of 7°C.*

## **C.3.3 Coatings based on ebonite**

### **IQL Ltd**

DWI 56/4/748 [IQL 136 DW Hard Ebonite](#)

For this product the following condition applies:

*This company has been granted approval to apply and cure this product on or within water retaining structures*

## **C.4 FLEXIBLE COVERS AND LININGS FOR WATER RETAINING STRUCTURES**

### **DRC Polymer Products Ltd**

DWI 56/4/337 [Hylam FPA](#)

### **Sarnafil Ltd**

DWI 56/4/510 [Sarnafil MCG 780-15](#)

### **Stevens Geomembranes - JPS Elastomerics**

DWI 56/4/278 [Stevens Polypropylene Geomembrane](#)

### **TBS Elastomers**

DWI 56/4/278 [Ecoseal PP - DW](#)

Note: Laminated flexible covers and linings for water retaining structures may not necessarily have been assessed for uses totally immersed in water, e.g. as baffles.

## **C.5 CEMENTITIOUS COATINGS**

### **BASF Construction Chemicals ( UK) Ltd**

DWI 56/4/156 [Mainline](#)

For this product the following condition applies:

*This product has been approved for use only in contact with water of alkalinity greater than 40 mg l<sup>-1</sup> CaCO<sub>3</sub>.*

DWI 56/4/86 [Thoroseal FX 100](#)

DWI 56/4/86 [Thoroseal Plaster Mix/Acryl 60](#)

DWI 56/4/86 [Thoroseal/Acryl 60](#)

### **British Cement Association**

DWI 56/4/453 [Cemline I](#)

DWI 56/4/465 [Cemline II](#)

For these products the following condition applies:

*Use of these generic products must conform to the In-situ cement mortar lining-Operational Guidelines and Codes of Practice published by Water Research Centre plc, 1990 (ISBN 0902156 84 5).*

### **Flexcrete**

DWI 56/4/95 [Flexcrete Cementitious Coating 851 Grey](#)

DWI 56/4/95 [Flexcrete Cementitious Coating 851 White](#)

DWI 56/4/95 [Monolevel 844SP](#)

### **Fosroc Ltd**

WS 34/1/109 [Nitocote CM 210](#)

For this product the following condition applies:

*The minimum cure time is 7 days.*

### **Fullstop Technology Ltd**

DWI 56/4/487 [Xypex Admix C-1000 NF](#)

DWI 56/4/487 [Xypex Concentrate](#)

DWI 56/4/487 [Xypex Modified](#)

### **ITW Irathane International**

DWI 56/4/293 [Irathane CR 94](#)

### **Natural Cement Distribution Ltd**

DWI 56/4/840 [NATCEM AC](#)

### **Sika Ltd**

DWI 56/4/94 [Sikatop-Seal 107](#)

For this product the following condition applies:

*The product must be cured for a minimum 7 days at a minimum temperature of 7°C.*

### **Vandex International Ltd**

DWI 56/4/48 Vandex BB 75  
DWI 56/4/48 Vandex BB White  
DWI 56/4/48 Vandex Concrete Grey  
DWI 56/4/48 Vandex Mineralit  
DWI 56/4/48 Vandex Premix  
DWI 56/4/48 Vandex Pure  
DWI 56/4/48 Vandex Super  
DWI 56/4/48 Vandex Uni Mortar 1

## **C.6 SEALANT & REPAIR MATERIALS**

### **BASF Construction Chemicals ( UK) Ltd**

DWI 56/4/156 Dryjoint/Acryl 60  
DWI 56/4/156 Structurite/Acryl 60  
DWI 56/4/144 Thoroflex 200 expansion joint system

For this product the following condition applies:

*This product must be cured for a minimum of 21 days at a minimum temperature of 7°C*

### **Flexcrete**

DWI 56/4/95 Fastfill  
DWI 56/4/95 Monomix  
DWI 56/4/95 Monomix WS  
DWI 56/4/95 Steel Reinforcement Protector 841

### **Fosroc Ltd**

DWI 56/4/297 Renderoc Plug 20

### **Fullstop Technology Ltd**

DWI 56/4/487 Xypex Patch'n Plug

### **ITW Irathane International**

DWI 56/4/276 Irathane Plug

### **Natural Cement Distribution Ltd**

DWI 56/4/483 NATCEM 35  
DWI 56/4/840 NATCEM AC  
DWI 56/4/483 Shotcrete 513

### **Samuel Cooke & Co Ltd**

DWI 56/4/718 Fastplug Cement

### **Sika Ltd**

DWI 56/4/94 Plastocrete OC  
DWI 56/4/94 Sika 1

For these products the following condition applies:

*This product is approved for use with Portland BS12 cement.*

DWI 56/4/217 Sika 101 HD

For this product the following condition applies:

*The minimum cure time is 21 days.*



DWI 56/4/94 [Sika 4a](#)  
DWI 56/4/94 [Sika AER](#)

For these products the following condition applies:  
*This product is approved for use with Portland BS12 cement.*

DWI 56/4/216 [Sika Monotop 610/612](#)

For this product the following condition applies:  
*The product must be cured in accordance with the cure curves provided in the Instructions for Use. The required cure time can be calculated by the user from the minimum daily temperature at the site of application. If the temperature cannot be measured and recorded then a minimum cure period of 21 days must be used. (The approval for this product applies solely to this product and does not include primer materials.)*

DWI 56/4/94 [Sikacem 133 Gunita](#)

For this product the following condition applies:  
*The minimum cure time is 21 days.*

DWI 56/4/94 [Sikadur Combiflex Using Sikadur 31 Rapid](#)

For this product the following condition applies:  
*This product must be cured in accordance with the cure curves provided in the Instructions for Use. The required cure time can be calculated by the user from the minimum daily temperature at the site of application. If the temperature cannot be measured and recorded then a minimum cure period of 15 days must be used.*

DWI 56/4/94 [Sikatop 121](#)  
DWI 56/4/94 [Sikatop 122](#)  
DWI 56/4/94 [Sikatop 122HB](#)

For these products the following condition applies:  
*The minimum cure time is 21 days.*

#### **Vandex International Ltd**

DWI 56/4/48 [Vandex Plug](#)

## **PART D: MEMBRANE AND FILTRATION SYSTEMS**

For products in this section the following general condition applies:  
*Products must be installed upstream of any final point of disinfection.*

Note: A list of membranes considered by the Drinking Water Inspectorate to be capable of continuously removing or retaining particles greater than 1-micron diameter is available on the DWI website at:  
<http://www.dwi.gov.uk/regs/crypto/approval.shtm>

### **D.1 MEMBRANE AND FILTRATION ELEMENTS/SYSTEMS**

#### **Amazon Filters Ltd**

DWI 56/4/702 Amazon SupaGard Cartridge Filters  
DWI 56/4/702 Amazon SupaSpun II Cartridge Filters

#### **Arkal Filtration Systems CS Ltd**

DWI 56/4/425 Spinclean 3 SK 2-2 Filter

#### **Atkins Fulford Hydro Ltd**

DWI 56/4/456 Filtomat Microcheck System  
DWI 56/4/113 Filtomat Microfibre MT 22P Filter Unit  
DWI 56/4/113 Filtomat Microfibre MT 33P Filter Unit  
DWI 56/4/113 Filtomat Microfibre MT 38P Filter Unit  
DWI 56/4/113 Filtomat Microfibre MT 44P Filter Unit

#### **Hydranautics BV**

DWI 56/4/680 CPA3 Range of Reverse Osmosis Membrane Systems  
DWI 56/4/686 ESPA2 Range of Reverse Osmosis Membrane Systems  
DWI 56/4/689 HYDRAcap  
DWI 56/4/683 SWC Range of Membrane Filtration Elements

#### **Kalsep UK Ltd**

DWI 56/4/277 Fibrotex Aqua Filter Elements  
DWI 56/4/277 Kalmem Polyethersulphone Hollow Fibre Element  
DWI 56/4/277 PBT Fibrotex Filter Element

#### **Koch Membrane Systems**

DWI 56/4/269 ROGA 8133 UF-D  
DWI 56/4/204 Targa Modules V and H  
DWI 56/4/204 TFC 2822 HF-370-D Membrane Element  
DWI 56/4/204 TFC 2832 HF-560-D Membrane Element  
DWI 56/4/204 TFC 8822 HR-400-D Membrane Element  
DWI 56/4/204 TFC 8823 ULP-365-D Membrane Element  
DWI 56/4/204 TFC 8823 ULP-400-D Membrane Element  
DWI 56/4/204 TFC 8923 S-400-D Membrane Element

**Memcor Ltd**

- DWI 56/4/706 Memcor Continuous Microfiltration (CMF) M1/M2 System
- DWI 56/4/706 Memcor Continuous Microfiltration (CMF) M10 System, with polypropylene or PVDF membranes
- DWI 56/4/706 Memcor Continuous Microfiltration (CMF-L) L10 System, with polypropylene or PVDF membranes
- DWI 56/4/706 Memcor Submerged Continuous Microfiltration (CMF-S) S10 System, with polypropylene or PVDF membranes
- DWI 56/4/706 Memcor Continuous Microfiltration (CMF-L) L20 System, with PVDF membranes

**Pall Europe Ltd**

- DWI 56/4/695 Pall Microza UNA-620C microfiltration module
- DWI 56/4/793 Pall Microza UNV-6203 micro-filtration modules
- DWI 56/4/396 Pall Microza USV-6203 micro-filtration modules
- DWI 56/4/314 Pall 'Ultipor' 'GF Plus' filter type MWH27

**PCI Membranes**

- DWI 56/4/680 C10 Module
- DWI 56/4/627 CA202 membrane
- DWI 56/4/627 CA222 membrane
- DWI 56/4/627 ES404 membrane
- DWI 56/4/517 Ultrabar (incorporating Kalmem membrane)

**Pridesa Proyectos e Instalaciones de Desalación S.A.**

- DWI 56/4/696 Amazon Cartridge Filter PA-9B-1500

**USFilter-Memcor, Microfloc and General Filter Products**

- DWI 56/4/761 MULTIBLOCK Filter Underdrains

**X-FLOW B.V.**

- DWI 56/4/324 S-150 FSFC Membrane Filtration Elements
- DWI 56/4/324 S-225 FSFC Membrane Filtration Elements
- DWI 56/4/324 SXL-150 FSFC Membrane Filtration Elements
- DWI 56/4/324 SXL-225 FSFC Membrane Filtration Elements

**Zenon Environmental Inc**

- DWI 56/4/630 ZeeWeed 1000a Membrane Filtration Module
- DWI 56/4/756 ZeeWeed 1000 V3 Membrane Filtration Module
- DWI 56/4/418 ZeeWeed 500b Membrane Filtration System
- DWI 56/4/628 ZeeWeed 500c, Membrane Filtration Module
- DWI 56/4/629 ZeeWeed 500d Membrane Filtration Module

**Zenon Europe Kft**

- DWI 56/4/835 ZeeWeed 500d Membrane Filtration Module
- DWI 56/4/835 ZeeWeed 500d (440) Membrane Filtration Module

## ***D.2 VESSELS AND CONTAINERS FOR MEMBRANE AND FILTRATION ELEMENTS***

### **Fileder Filter Systems**

DWI 56/4/858 BFS (Bag Housings)

DWI 56/4/858 FOS (Cartridge Housings)

### **PCI Membranes**

DWI 56/4/410 Low Pressure uPVC Vessel

## ***D.3 ELECTRODIALYSIS WATER TREATMENT UNITS***

### **Ionics (UK) Ltd**

DWI 56/4/480 Ionics Electrodialysis Reversal Water Treatment Unit

## **PART E: OTHER WATER TREATMENT WORKS INSTALLATIONS**

### ***E.1 TANKS***

#### **ABC Stainless Ltd**

DWI 56/4/542 ABC Storage, process tanks and vessels

DWI 56/4/705 Replacement GAC Tank

#### **AJ Engineering & Construction Services Ltd**

DWI 56/4/561 AJE Stainless Steel Tank

#### **APT Marine Engineering Ltd**

DWI 56/4/697 Replacement Water Clarifier Tank

#### **Crossland Tankers (Burnley) Ltd**

DWI 56/4/792 Tanks for transportation of drinking water

#### **Forbes Technology Ltd**

DWI 56/4/299 Cheetah tanks (polypropylene)

DWI 56/4/299 Lion Range (polypropylene inner surface backed with glassfibre laminate)

DWI 56/4/299 Lynx tanks (PVC inner surface backed with glassfibre laminate)

#### **J.K. Fabrications Limited**

DWI 56/4/732 JKF 304 and 316 Stainless Steel Tanks

#### **L.E.S Engineering Ltd**

DWI 56/4/830 Pipework/Tanks/Vessels

#### **MMP Fabrications Ltd**

DWI 56/4/785 Stainless Steel Storage Tanks

#### **Permastore Ltd**

DWI 56/4/594 Isofusion (vitreous enamelled tank)

#### **Powerrun Project Management Ltd**

DWI 56/4/611 Stainless Steel Grade 316L Potable Water Reservoir Tanks

#### **Silotank (Digestors, Silos & Tanks) Ltd**

DWI 56/4/747 Connaught Range of Tanks

DWI 56/4/747 Connaught Range of Towers

DWI 56/4/498 Leinster Range of Thermoplastic Tanks

DWI 56/4/498 Leinster Range of Towers

#### **Vulcan Tanks Ltd**

DWI 56/4/621 Aquastore

## ***E.2 UNDERDRAINS***

### **AMT Systems Ltd**

DWI 56/4/708 Lateral Filter Underdrain System  
DWI 56/4/709 Monolithic Floor Filter Underdrain System

### **F.B Leopold Co Inc**

DWI 56/4/371 HDPE Universal Underdrain and IMS Cap

### **Severn Trent Services Ltd**

DWI 56/4/522 Tetra LP Block System

### **USFilter-Memcor, Microfloc & General Filter Products**

DWI 56/4/761 MULTIBLOCK Media Retaining Gravity Filter Underdrains

## ***E.3 PRESSURE VESSELS***

### **Compressor & Power Engineers Ltd**

DWI 56/4/560 CPE Pressure Vessels - 316L Stainless Steel  
DWI 56/4/560 CPE Pressure Vessels-304 Stainless Steel

### **Midas Technologies (GB) Ltd**

DWI 56/4/767 Aqua-HiLo

### **MMP Fabrications Ltd**

DWI 56/4/786 Stainless Steel Pressure Vessels

### **Portobello Fabrications Ltd**

DWI 56/4/788 Pressure Filter Vessel  
DWI 56/4/646 Saturator/Degasser Vessel

*The product listed below can only be used upstream of a Reverse Osmosis unit.*

DWI 56/4/827 Pressure Filter Water Collector Pipework

### **Quantum Engineering Developments Ltd**

DWI 56/4/558 Quantum Pressure Vessels- 304L  
DWI 56/4/558 Quantum Pressure Vessels- 316L

## ***E.4 OTHER PRODUCTS USED IN THE TREATMENT OF WATER***

### **Celtic Vacuum Ltd**

DWI 56/4/846 Stainless Steel Baffle Wall

### **Degremont UK Limited**

DWI 56/4/695 Lamella Module DH50/DH80

### **Forbes Technology Ltd**

DWI 56/4/711 Cheetah Tower Packings

### **Johnson Filtration Systems**

DWI 56/4/653 Screens, Casing and Accessories for Water Wells

**L.E.S Engineering Ltd**

DWI 56/4/830 Pipework/Tanks/Vessels

**Memcor Ltd**

DWI 56/4/609 Memcor EF

**Midland Wire Cordage Co Ltd**

DWI 56/4/828 316 Stainless Steel Wire Rope

**Nijhuis Water Technology B.V.**

DWI 56/4/620 IPF and NPF model of Dissolved Air Flotation units

**OTV Ltd**

DWI 56/4/309 Lamellar Separator Plates Type GA and H

**Paques B.V.**

DWI 56/4/768 Astraseparator ARS-C

DWI 56/4/724 Astraseparators ARS-standard

**Passavant-Roediger-Anlagenbau GmbH**

DWI 56/4/491 Lamellar Separator plates

**Purac Ltd**

DWI 56/4/741 Saturator Vessel Pall Rings

**Scottish Water Solutions**

DWI 56/4/740 Stainless steel baffle walls for Floc/DAF cells

**Severn Trent Services Ltd**

DWI 56/4/632 Rapid Gravity Filter Air Header

**Veolia Water Systems Ltd**

DWI 56/4/770 Package Actiflo and Multiflo

**Vexamus Water Ltd**

DWI 56/4/608 Dynasand Sand Filter DS5000AD

DWI 56/4/608 Dynasand Sand Filter DST30D

DWI 56/4/622 Lamella Plate Pack LP255

DWI 56/4/639 Lamella Plate Separators Flocculation Tank

DWI 56/4/728 Lamella Plate Separators LP Range (LP80, LP100, LP140, LP170, LP190)

DWI 56/4/640 Lamella Plate Separators LS Range (LS25, LS40, LS60, LS100, LS120, LS165)

DWI 56/4/663 Lamella Plate Separators LT Range (LT15, LT25, LT40, LT60)

## **PART F: LOW CONTACT COMPONENTS AND PRODUCTS**

### **INTRODUCTION**

The relevant Regulations cover products used in contact with water intended for human consumption where the contact surface area and/or contact time are low. These products do not require the same rigorous evaluation as that applied to products such as pipes and their coatings. Full details of the types of products covered under this requirement are given in Section 3 of Advice Sheet 8 (<http://www.dwi.gov.uk/31/pdf/Advicesheet8.pdf>). This Advice Sheet also contains guidance on the use of these components and products in the provision of public water supplies.



## CHANGES TO APPROVALS AND AMENDMENTS TO THE LIST OF APPROVED PRODUCTS

### 1.1 Modified Conditions of Approval

Information letter <http://www.dwi.gov.uk/regs/infolett/2006/info0906.shtm>: update on the *in-situ* resin lining of water mains under Regulation 31 (10) (b) of the Water Supply (Water Quality) Regulations 2000 (2001 Wales), and Information Letter 4/2006 issued under the Water Supply (Water Quality) (Scotland) Regulations 2001 in Scotland.

### 1.2 List of Products refused Approval under Regulation 31 (4) (a)

Company Name	Product Name
Polypipe Building Products	Polypipe Effast ABS Pressure Pipe

### 1.3 Prohibition of use of Substances and Products

The Authorities have not recently prohibited the use of any substances or products.

### 1.4 Revocation of Approval

Company Name	Product Name
A & J Fabrications Ltd	Dirty Wash Water Cleaning System
Creto International Inc Evercrete Corporation	Evercrete DPS
Munters Ltd	Tubedek FS 41.50
MC Building Chemicals	MC Injectopress 2300T
Pentair Water Treatment	Codeline Pressure Vessel E8B/SP
	Codeline Pressure Vessel E8L/SP
	Codeline Pressure Vessel E8S/SP
	Codeline Pressure Vessel E8U/SP
	Codeline Pressure Vessel Model 80A15
	Codeline Pressure Vessel Model 80A30
	Codeline Pressure Vessel Model 80A45
PTI Technology	Steelflow
Rivitswade	Pipes lined with Copon Hycote 162 PWX
Delkor Ltd	Spiral Separator
<b>*The following products are revoked only for emergency use, other listings of them remain valid</b>	
Aqua Cure plc	ACHY SHP*
	Aqua Dosa Sanitiser*
Ceratherm Ltd	Biotant*
ROAM Chemie NV	Huwa-San TR5*
	Huwa-San TR50*
	Tiosan*
SafeSol Ltd	SafeSol 3*
Swissteril International 5755 Ltd	Steril*
Water Treatment Products Ltd	Sanosil SO15*
	Sanosil Super 25*
	Sanosil Super 25 Ag*

### 1.5 Approval of Processes

The Authorities have not recently prohibited the use of any processes nor required any water undertaker to apply for approval of any process.

## 1.6 Deletions from the list of approved products in the last twelve months

### 1.6.1 Products deleted because they are no longer supplied or their approval has lapsed

If these products were purchased before the date of withdrawal or removal they may still be used provided they remain fit for purpose.

Company Name	Product Name	Date of Removal
E Wood Ltd	Thortex Chemi-tech PW	09/05/08
Fusion Group PLC	SDR 11 PSD PE-X BP80	09/05/08
CemPipe Ltd	Cempipe HTH 752	09/05/08
Fusion Provida	Fusion Black 80	09/05/08
GPS	GPS Q Black Polyethylene Pipe	09/05/08
Koch Membrane Systems	TFC 4820 HR-D Membrane Element	20/06/08
	TFC 4820 ULP-D Membrane Element	20/06/08
	TFC 8822 XR-400-D Membrane Element	20/06/08
	TFC 8832 XR-575-D Membrane Element	20/06/08
	TFC 4920 S-D Membrane Element	20/06/08
Saint Gobain Pipelines plc	Saint Gobain Pipelines System CL (Icoment)	15/12/08
	Saint Gobain Pipelines System XL Plus	15/12/08
	Saint Gobain Pipelines PaM Natural Pipeline Components	15/12/08

### 1.6.2 Products deleted because they are covered by a BS EN

Company	Product Name	BS EN Number

The Authorities remain satisfied that the substances or products listed above are unlikely used alone to affect adversely the quality of water. Consequently, the relevant Regulations authorise its application to, or introduction into, water supplied for regulation 4(1) purposes.

## 1.7 Changes in ownership or designation of approved products in the last twelve months

The following companies have had ownership of existing product approvals transferred to other companies, or have changed the name of the product:

### 1.7.1 Change in company name or ownership

COMPANY NAME		Date of Change
Old	New	
E Wood Ltd	3M E Wood Corrosion Protection Products	09/05/08
Subterra – a division of Enterprise Managed Services Ltd	Subterra – a division of Daniels Contractors Ltd	04/08/08
Uponor Ltd	Radius Systems Ltd	04/08/08

## 1.7.2 Change in product designation in the last twelve months

Company	PRODUCT NAME		Date of Change
	Old	New	
Radius Systems Ltd	Uponor 001 to 017	Radius 001 to 017	04/08/08
3M E Wood	Copon Hycote 162 PWX, 169, 169HB, 169LV	Scotchkote 162PWX, 169, 169HB, 169LV	04/08/08

## 1.8 Additional Products added to the List in the last twelve months (consolidated into the main text of this list)

### 1.8.1 New Products approved in the last twelve months

Company	Product	Date of acceptance
Noksel Steel Pipes Co Inc	Steel pipes lined with Copon Hycote 162PWX	28/04/08
Celtic Vacuum Ltd	Stainless Steel Baffle Wall	30/04/08
Natural Cement Distribution Ltd	NATCEM AC	06/05/08
Polypipe Building Products Ltd	Polyguard: Polyethylene/Aluminium/Polyethylene barrier pipes	07/05/08
Fieder Filter Systems	BFS (Bag Housings)	04/07/08
	FOS (Cartridge Housings)	04/07/08
Proton Water Services Ltd	SELCOPERM	04/07/08
Western	Aquastax and Polytank	04/07/08
Atkins Fulford Hydro Ltd	Filtomat Microfibre MT22P Filter Unit	04/07/08
	Filtomat Microfibre MT44P Filter Unit	04/07/08
Tevan BV	Tevan Panox	08/07/08
GPS	Excel 3c (Blue)	20/08/08
	Excel 3c (Black)	20/08/08
Saint-Gobain	Blutop	03/10/08
Rapak	1100LLA956	14/11/08
ASD Metal Services	ASD Stainless Steel tubes and pipes	14/11/08
Avista Technologies (UK) Ltd	Vitec 7000a	27/11/08
	RoClean L403	19/01/09
	Vitec 2000	09/02/09

1.8.2 Previously approved, now reinstated in the last twelve months

<b>Company</b>	<b>Product</b>	<b>Date of removal</b>	<b>Date of acceptance</b>
Ciba UK plc	Magnafloc LT20	December 1999	21/01/09
	Magnafloc LT25	December 1999	21/01/09
	Magnafloc LT27	December 1999	21/01/09
	Magnafloc LT31	December 1999	21/01/09
	Magnafloc LT32	December 1999	21/01/09
	Magnafloc LT35	December 1999	21/01/09
	Magnafloc LT37	December 1999	21/01/09
	Magnafloc LT38	December 1999	21/01/09
Kemira Chemicals b.v	Superfloc A100 PWG	December 1999	
	Superfloc A110 PWG	December 1999	
	Superfloc A120 PWG	December 1999	
	Superfloc A130 PWG	December 1999	
	Superfloc A137 PWG	December 1999	
	Superfloc A150 PWG	December 1999	
	Superfloc C-492 PWG	December 1999	
	Superfloc N100 PWG	December 1999	
	Superfloc N300 PWG	December 1999	
	Superfloc C521	December 1999	
	Superfloc C573	December 1999	
	Superfloc C587	December 1999	
	Superfloc C592	December 1999	
Nalco Europe b.v	Nalco 71223	December 1999	
	Nalco 71225	December 1999	
Ciba UK plc	Magnafloc LT22-DWI	December 1999	
	Magnafloc LT22S-DWI	December 1999	

### 1.9 Changes to existing products since 28<sup>th</sup> April 2008

This table reflects the changes that have been made to products and include changes in relation to Instructions for Use, conditions of use, etc

Company	Product	Nature of Change	Date of acceptance
Portobello Fabrications	Pressure Filter Water Collector Pipework	Material	28/04/08
Koch Membrane Systems	8822XR-400-D; 2822HF-370-D; 8832XR-575-D; 2832HF-560-D; 4820HR-D; 8822HR-400-D; 4820ULP-D; 8823ULP-365-D; 8823ULP-400-D; 4920S-D; 8923S-400-D and Roga 8133UF-D	Material	28/04/08
Koch Membrane Systems	8822XR-400-D; 2822HF-370-D; 8832XR-575-D; 2832HF-560-D; 4820HR-D; 8822HR-400-D; 4820ULP-D; 8823ULP-365-D; 8823ULP-400-D; 4920S-D; 8923S-400-D and Roga 8133UF-D	Material	28/04/08
E Wood Ltd	Copon Hycote 162PW	Additional notes	28/04/08
3M E Wood	Copon Hycote 162PW Copon Hycote 162PWX Copon Hycote 169 Copon Hycote 169LV Copon Hycote 169HB Copon Hycote 160PW Copon Hycote 165PW Copon Hycote 165PW-PR Geopox GX014	Company name change	19/05/08
Zenon Europe Kft	All membranes	Material	10/06/08
PCI Membranes	CA202 Membrane ES404 Membrane	Instructions For Use	08/07/08
3M E Wood	Scotchkote 162PWX Scotchkote 169 Scotchkote 169HB Scotchkote 169LV	Product Name	04/08/08
Subterra – a division of Daniels Contractors Ltd	All products	Company name change	04/08/08
Radius Systems Ltd	Radius 001 to 017	Company and Product name change	04/08/08
Flexcrete Technologies Ltd	Fastfill MONOLEVEL 844SP MONOMIX	Instructions For Use	20/08/08

Memcor	All membranes	Material	20/08/08
X-Flow B.V	All membranes	Material	22/09/08
Forbes Technologies Ltd	Cheetah tanks Lion tanks	Material	23/09/08
Koch Membrane Systems	TFC	Material	27/08/08
Flexcrete Technologies Ltd	Monomix WS	Instructions for Use	30/01/09
Subterra – a division of Daniels Contractors Ltd	Fast-Line Plus	Instructions for Use	09/02/09
Memcor	Memcor 602019 PVdF hollow fibre membranes	Material	12/03/09

### 1.10 New and revised BS EN standards issued in the last twelve months

The results of the issue of new standards may require the removal of products listed in the main body of the text. Products removed from the main body of the text can be found in table 1.6.2 earlier in this section. Titles of the relevant BS ENs can be found in the tables in Annex 2.

<b>BS EN Number</b>	<b>Revision/New</b>	<b>Comment</b>	<b>Date published by BSi</b>
891:2004	Revision	Annex 2.1 not previously updated by DWI	31/12/04
1204:2005	Revision	Annex 2.1 not previously updated by DWI	31/03/05
1205:2005	Revision	Annex 2.1 not previously updated by DWI	31/03/05
1201:2005	Revision	Annex 2.1 not previously updated by DWI	01/04/05
900:2007	Revision		30/09/08
1407:2008	Revision		30/09/08
1408:2008	Revision		30/09/08
1410:2008	Revision		30/09/08
12518:2008	Revision		30/09/08
15482:2007	New		30/09/08
936:2006	Revision		31/10/08
1019:2005	Revision		31/10/08
1197:2006	Revision		31/10/08
1017:2008	Revision		31/12/08
12174:2006	Revision		31/12/08
901:2007	Revision		31/12/08
15028:2006	New		31/12/08
15030:2006	New		31/12/08
15040:2006	New		31/12/08
15041:2006	New		31/12/08
15039:2006	New		31/12/08
14805:2008	New		31/12/08
1018:2006	Revision		
12911:2006	Revision	Inorganic supporting and filtering materials	
1409:2008	Revision		31/01/09
12175:2006	Revision		31/01/09
15029:2006	New		28/02/09
12915:2003	Revision corrigendum	Incorporating May 2006	28/02/09

## LIST OF RELEVANT EUROPEAN STANDARDS

### 2.1 British Standards BS EN for Chemicals used for Treatment of Water

#### IMPORTANT NOTES

1. The existence of a relevant EN standard does not necessarily mean that all supplies of a specific treatment chemical or product will have been tested to and shown to meet the appropriate requirements of the EN. These standards contain requirements for impurities and may additionally have a National Condition of Use assigned to them. Since EN standards for drinking water treatment chemicals and products do not contain mandatory requirements for attestation of conformity, it is the responsibility of the user of these products to ensure that the treatment chemicals or products provided by a specific supplier fully meet the test requirements of the relevant EN standard by provision of a certificate of attestation for the batch of chemical supplied or by internally checking through their own laboratories.

2. Clause 6.1.10.2 of BS 6700: 2006 (Design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages – Specification) states that chemicals used for disinfection of drinking water installations shall be those that are listed in the UK's List of substances, products and processes approved under the relevant regulations .

**This advice is wrong:** products listed in the “List of Approved Products for use in Public Water Supply”, the current title of this publication, have not been assessed for their effectiveness in any situation, and their safety has not been considered in the context of building water systems. BSi Standards is currently amending this clause of BS 6700.

#### For all of the chemicals listed the following general national condition of use applies:

The method of use and the purity of these products shall be such that, in the case of water for public supply, the water so treated meets the requirements of the relevant regulations .

BS EN	Chemical	Additional National Conditions of Use
13194: 2000	Acetic acid	None
1302: 1999	Aluminium based co-agulants – Analytical methods	None
881: 2004	Aluminium chloride, aluminium chloride hydroxide and aluminium chloride hydroxide sulfate (monomeric)	None
935: 2004	Aluminium iron (III) chloride (monomer) and aluminium iron (III) chloride hydroxide (monomeric)	None
887: 2004	Aluminium iron (III) sulfate	None
878: 2004	Aluminium sulfate	None
12122: 2005	Ammonia solution	None
12123: 2005	Ammonium sulfate	None
1421: 2005	Ammonium chloride	None
1407: 2008	Anionic and nonionic polyacrylamides	(i) no batch must contain more than 0.020% of free acrylamide monomer based on the active ingredient content; (ii) the dose must average no more than 0.25 mg l <sup>-1</sup> and never exceed 0.50 mg l <sup>-1</sup> of the active ingredient; (iii) an upper limit for the content of free acrylamide



		<i>monomer must be stated by the supplier for every batch; (iv) the method used for the analysis for free acrylamide monomer is entitled 'Determination of Acrylamide' published in the series 'Methods for the Examination of Waters and Associated Materials' by the Environment Agency.</i>
1018: 2006	Calcium carbonate	<i>None</i>
12485: 2001	Calcium carbonate, high-calcium lime and half burnt dolomite - Test methods	<i>None</i>
900: 2007	Calcium hypochlorite	<i>None</i>
1204: 2005	Calcium tetrahydrogen bis(orthophosphate)	<i>None</i>
936: 2006	Carbon dioxide	<i>None</i>
1410: 2008	Cationic polyacrylamides	<i>(i) no batch must contain more than 0.020% of free acrylamide monomer based on the active ingredient content; (ii) the dose must average no more than 0.25 mg l<sup>-1</sup> and never exceed 0.50 mg l<sup>-1</sup> of the active ingredient; (iii) an upper limit for the content of free acrylamide monomer must be stated by the supplier for every batch; and (iv) the method used for the analysis for free acrylamide monomer is entitled 'Determination of Acrylamide' published in the series 'Methods for the Examination of Waters and Associated Materials' by the Environment Agency.</i>
937: 1999	Chlorine	<i>None</i>
12671: 2000	Chlorine dioxide	<i>The combined concentration of chlorine dioxide, chlorite and chlorate should not exceed 0.5mg l<sup>-1</sup> as chlorine dioxide in the water entering supply.</i>
12386: 2005	Copper sulfate	<i>None</i>
1202: 2005	Dipotassium hydrogen orthophosphate	<i>None</i>
1199: 2005	Disodium hydrogen orthophosphate	<i>None</i>
1205: 2005	Disodium dihydrogen pyrophosphate	<i>None</i>
13176: 2000	Ethanol	<i>None</i>
1017: 2008	Half-burnt dolomite	<i>None</i>
12175: 2006	Hexafluorosilicic acid	<i>None</i>
12518: 2008	High-calcium lime	<i>None</i>
939: 2000	Hydrochloric acid	<i>Permission or consent for disposal of any wastewater generated to a sewer or watercourse must be obtained from the relevant water service company or Environment Agency, in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland as appropriate.</i>
902: 2000	Hydrogen peroxide	<i>Permission or consent for disposal of any wastewater generated to a sewer or watercourse must be obtained from the relevant water service company or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland, as appropriate. Products conforming to EN902 shall not contain stabilising or activation agents. If a product contains such agents it requires approval under the relevant regulations .  <i>Prior to introduction into supply all residual hydrogen peroxide must be demonstrably removed/destroyed</i></i>
888: 2004	Iron(III) chloride	<i>None</i>

891: 2004	Iron(III) chloride sulfate	None
15029:2006	Iron (III) hydroxide oxide	Under consideration – please seek advice from DWI
889: 2004	Iron(II) sulfate	None
890: 2004	Iron(III) sulphate liquid	None
14664: 2004	Iron(III) sulphate, solid	None
12126: 2005	Liquefied ammonia	None
13177: 2002	Methanol	None
1406: 1998	Modified starches	<i>The dose must not exceed 5 mg l<sup>-1</sup> of active ingredient.</i>
1204: 2005	Monocalcium phosphate	None
1201: 2005	Monopotassium hydrogen orthophosphate	None
1197: 2006	Mono zinc phosphate solution	None
12876: 2000	Oxygen	None
1278: 1999	Ozone	None
974: 2003	Phosphoric acid	<i>Permission or consent for disposal of any wastewater generated to a sewer or watercourse must be obtained from the relevant water service company or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland, as appropriate.</i>
15040:2006	Phosphonic acids and salts	Under consideration – please seek advice from DWI
1408: 2008	Poly(diallyldimethylammonium chloride)	<i>The dose used must not exceed 10 mg l<sup>-1</sup> of active ingredient.</i>
883: 2004	Polyaluminium chloride hydroxide and polyaluminium chloride hydroxide sulfate	None
885: 2004	Polyaluminium chloride hydroxide silicate	None
886: 2004	Polyaluminium hydroxide silicate sulfate	None
1409: 2008	Polyamines	<i>(i) The average dose should be 2.5 mg l<sup>-1</sup> and never exceed 5 mg l<sup>-1</sup> of active ingredient; (ii) no batch must contain more than 40 mg of 3-monochloropropane 1,2-diol per kg of active ingredient; (iii) the analytical system used for determining the batch content must have a limit of detection no greater than 4 mg kg<sup>-1</sup> and a maximum total standard deviation no greater than 4 mg kg<sup>-1</sup> at 40 mg kg<sup>-1</sup>. Both estimates must have at least 10 degrees of freedom and have been determined from batches of analyses carried out on not less than five separate days; and (iv) the supplier must state for every batch an upper limit for the content of 3-monochloropropane 1,2-diol.</i>
15039:2006	Polycarboxylic acids and salts	Under consideration – please seek advice from DWI
15041:2006	Polyphosphates	Under consideration – please seek advice from DWI
1201: 2005	Potassium dihydrogen orthophosphate	None
12672: 2000	Potassium permanganate	None
12678: 2000	Potassium peroxomonosulfate	None
1211: 2005	Potassium tripolyphosphate	None
15030:2006	Silver salts	On advice from HSE – these compounds may not be used in contact with water intended for human consumption.
1205: 2005	Sodium acid pyrophosphate	None

1405: 1998	Sodium alginate	<i>the dose used must not exceed 0.5 mg l<sup>-1</sup> of active ingredient</i>
882: 2004	Sodium aluminate	<i>None</i>
1208: 2005	Sodium calcium polyphosphate	<i>None</i>
897: 2005	Sodium carbonate	<i>None</i>
15028:2006	Sodium chlorate	<i>Under consideration – please seek advice from DWI</i>
14805:2008	Sodium chloride for OSEC	<i>Under consideration – please seek advice from DWI</i>
973: 2002	Sodium chloride for regeneration of ion exchangers	<i>None</i>
938: 2000	Sodium chlorite	<i>(i) the dose must be such that the combined concentration of chlorine dioxide, chlorite and chlorate does not exceed 0.5 mg l<sup>-1</sup> as chlorine dioxide in water potentially entering supply; and (ii) permission or consent for disposal of any wastewater generated to a sewer or water course must be obtained from the relevant water service company or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland, as appropriate.</i>
12931: 2000 12932: 2000 12933: 2000	Sodium dichloroisocyanurate, anhydrous Sodium dichloroisocyanurate, dihydrate Trichloroisocyanuric acid	<b>Conditions if product is used as a cleaning agent:</b> <i>(i) the dose must be such that the final concentration in the water used to wash installations does not exceed 1000 mg l<sup>-1</sup> of free available chlorine; (ii) that following cleaning and disinfection, the installation is flushed to ensure that the residual chlorine concentration is acceptable to consumers; and (iii) permission or consent for disposal of any wastewater generated to a sewer or watercourse must be obtained from the relevant water service company or Environment Agency in England and Wales or Scottish Environment Protection Agency (SEPA) in Scotland, as appropriate. Water companies should check with their suppliers to ensure that products to be cleaned and disinfected will not be adversely affected by the concentration of chlorine to be employed.</i>  <b>Conditions if product is used as an emergency disinfectant:</b> <i>(i) where circumstances are such that the water being treated is not grossly contaminated and a controlled contact time of not less than 15 minutes between dosing and taking it into use can be maintained, not more than 10 mg l<sup>-1</sup> of sodium dichloro-isocyanurate compound should be applied and not more than 1mg l<sup>-1</sup> of free residual chlorine should be present at the end of the relevant contact time. It is recommended that consumers should be exposed to such waters containing chloro-isocyanurates for only as long as is required to restore conventional treatment, or for no more than 90 days in any period of a year, whichever is applicable; (ii) under circumstances where water sources may be grossly contaminated, to ensure inactivation of most likely harmful organisms, up to 20 mg l<sup>-1</sup> sodium dichloro-isocyanurate may be added, with a recommended contact time of 15 minutes before use. It is recommended that consumption of water dosed at this</i>

		<i>rate of treatment should be for only as long as is necessary before it is possible to effect control of the residual chlorine after contact to 1 mg l<sup>-1</sup>, and then to follow the requirements set out in condition (i); and (iii) should it be necessary for specific groups of consumers to be exposed to water containing chloro-isocyanurates for periods greater than 90 days either continuously or in a year, it is recommended that independent medical advice be obtained from a person who is not under the control of the water undertaker.</i>
1198: 2005	Sodium dihydrogen orthophosphate	None
12121: 2005	Sodium disulfite	None
12173: 2005	Sodium fluoride	None
12174: 2006	Sodium hexafluorosilicate	None
898: 2005	Sodium hydrogen carbonate	None
12120: 2005	Sodium hydrogen sulfite	None
896: 2005	Sodium hydroxide	None
901: 2007	Sodium hypochlorite	<i>The method of use and the purity of these products shall be such that, in the case of water for public supply, the water so treated meets the requirements of the relevant regulations .</i>
15482:2007	Sodium Permanganate	Under consideration – please seek advice from DWI
12926: 2000	Sodium peroxodisulfate	None
1212: 2005	Sodium polyphosphate	None
1209: 2003	Sodium silicate	None
12124: 2005	Sodium Sulfite	None
12125: 2005	Sodium thiosulfate	None
1210: 2005	Sodium tripolyphosphate	None
1019: 2005	Sulfur dioxide	None
899: 2003	Sulfuric acid	None
1207: 2005	Tetrapotassium pyrophosphate	None
1206: 2005	Tetrasodium pyrophosphate	None
1203: 2005	Tripotassium orthophosphate	None
1200: 2005	Trisodium orthophosphate	None

## 2.2 British Standards BS EN for Inorganic Supporting and Filtering Materials Used for Treatment of Water Intended for Human Consumption

**For all of the products listed the following general national condition of use applies;**  
*The method of use and the purity of these products shall be such that, in the case of water for public supply, the water so treated meets the requirements of the relevant regulations .*

<b>BS EN</b>	<b>Title</b>	<b>Additional National Conditions of Use</b>
12909: 2005	Anthracite	None
12912: 2005	Barite	None
13754: 2003	Bentonite	None
14456: 2004	Bone charcoal	<i>The contact bed containing the product must be adequately back-washed (until backwash water is clear of fines) to remove any readily leachable materials before connection to the supply.</i>
12905: 2005	Expanded aluminosilicate	None
12910: 2005	Garnet	None
13753: 2002	Granular activated alumina	<i>(i) the contact bed containing the product must be adequately back-washed (until backwash water is clear of fines) to remove any readily leachable materials before connection to the supply; and</i>
12915 - 1: 2003	Granular activated carbon. Part 1: Virgin GAC	<i>(ii) before connection to the supply, the water undertaker or their appointed agent must carry out tests on the filtrate water to establish that use of the contact bed will not cause any adverse effect on the quality of water to be put into supply. These tests must include measurement of chlorine demand and a qualitative odour assessment, as well as tests to confirm that leaching of activating agents or any other substance used in the preparation or regeneration of the product will not cause a contravention of the standards prescribed in the relevant regulations .</i>
12915 - 2: 2003	Granular activated carbon. Part 2: Reactivated GAC	
12907: 2003	Pyrolised coal material	
12901: 1999	Inorganic supporting and filtering materials – Definitions	None
12902: 2004	Inorganic supporting and filtering materials – Methods of test	None
14369: 2003	Iron-coated granular activated alumina	None
13752: 2003	Manganese dioxide	None
12911: 2006	Manganese greensand	None
12903: 2003	Powered activated carbon	<i>The dose must not exceed 100 mg l<sup>-1</sup>.</i>
12913: 2005	Powdered diatomaceous earth	None
12914: 2005	Powdered perlite	None
12906: 2005	Pumice	None
12904: 2005	Silica sand and silica gravel	None

### 2.3 British Standards BS EN on the Influence of Materials on Water Intended for Human Consumption

<b>BS EN</b>	<b>Title</b>
1420-1: 1999	Influence of organic materials on water intended for human consumption – Determination of odour and flavour assessment of water in piping systems
12873-1: 2003	Influence of materials on water intended for human consumption – Influence due to migration – Part 1: Test method for non-metallic and non-cementitious factory made products
12873-2: 2005	Influence of materials on water intended for human consumption – Influence due to migration – Part 2: Test method for non-metallic and non-cementitious site – applied materials
12873-3: 2006	Influence of materials on water intended for human consumption – Influence due to migration – Part 3: Test method for ion exchange and adsorbent resins
12873-4: 2006	Influence of materials on water intended for human consumption – Influence due to migration – Part 4: Test method for water treatment membranes
13052-1: 2001	Influence of materials on water intended for human consumption – Organic materials – Determination of colour and turbidity of water in piping systems – Part 1: Test method
14395-1: 2004	Influence of materials on water intended for human consumption – Organoleptic assessment of water in storage systems – Part 1: Test method
14718: 2006	Influence of organic materials on water intended for human consumption – Determination of the chlorine demand – Test Method
14944-1: 2006	Influence of factory made cementitious products on organoleptic parameters – Test methods – Part 1: Influence of factory made cementitious products on organoleptic parameters
14944-3: 2007	Influence of factory made cementitious products on organoleptic parameters – Test methods – Part 3: Migration of substances from factory-made cementitious products
15664: 2008	Influence of metallic materials on water intended for human consumption – Dynamic rig test for assessment of metal release – Part 1: Design and operation

## 2.4 List of Authorised Cement Admixture Components

Regulation 25/31 letters 6/2000 and 03/2003 in England and Wales and Regulation 25 letters 3/2001 and 4/2003 in Scotland gave details of the arrangements for authorisation of civil engineering use of concrete in water retaining structures in treatment and distribution systems. The following list gives the chemical identity of admixture components considered acceptable for use in cement admixtures for use in concrete in contact with water in water retaining structures, providing the admixture is not added to the concrete at a concentration exceeding the manufacturer's recommended dose.

ADMIXTURE COMPONENT	USED AS
Abietic acid salts	Air entrainer
Aluminates, sodium or potassium	Accelerator
Aluminium hydroxides, amorphous	Accelerator
Anionic surfactants	Air entrainer
Butyl stearate	Waterproofing/ water repellent
Carbonate, sodium or potassium	Accelerator
Cellulose ethers	Stabiliser/pumping aid
Citric acid	Retarder
Decanoate, sodium	Air entrainer
Dimethylsiloxane, poly-	Defoamer agent for plasticisers/ superplasticisers
Dodecyl benzene sulphonate, sodium	Air entrainer
Fatty acid soaps	Waterproofing/ water repellent
Formate, calcium	Accelerator
Gluconic and Heptonic acid salts	Retarder/ water reducer/ plasticiser
Lauryl ether sulphate, sodium	Air entrainer
Lignosulphonates	Water reducer/ plasticiser
Mono and di saccharides, eg sucrose, xylose	Retarder
Nitrate, calcium, sodium or potassium	Accelerator
Oleic acid and salts	Waterproofing/ water repellent
Oxalate, lithium	Accelerator
Polysaccharides	Water reducer/ plasticiser
Phosphate, dibutyl	Defoamer agent for plasticisers/ superplasticisers
Phosphate, tributyl	Defoamer agent for plasticisers/ superplasticisers
Phosphates (inorganic)	Retarder
Phosphonates (organic)	Retarder
Polycarboxylate/ polyether copolymer	Superplasticiser
Silicates, sodium	Accelerator
Starch ethers	Stabiliser/pumping aid
Stearate salts	Waterproofing/ water repellent
Sulphonated melamine formaldehyde condensate	Superplasticiser
Sulphonated naphthalene formaldehyde condensate	Superplasticiser
Tartaric acid	Retarder
Thiocyanate, sodium	Accelerator
Triethanolamine	Water reducer/ plasticiser

**Note 1:** Biocides/ preservative and agents, antifoam/ air control agents, present in the admixture at less than 1.0% in total and the dilution water used in cement admixture formulations are excluded from the requirement for authorisation.

**Note 2:** The use of ferrous or stannous sulphate is acceptable as reducing agents to control concentrations of hexavalent chromium (VI) in cement.

**Note 3:** Fibre additions to concrete - , the use of polymeric or carbon reinforcing fibres should not be a cause for concern, providing that either -

- concrete made with them, at the proposed concentration/level conforms with the requirements of BS 6920 odour and flavour and growth of aquatic microorganisms tests OR
- the reinforcing fibres have already met the requirements of BS 6920



**RECOGNISED MATERIALS FOR USE IN THE MANUFACTURE OR ASSEMBLY OF PRODUCTS**

The only products approved under Regulation 31(4)(a) in England and Wales and Regulation 27 (4)(a) in Scotland (and detailed in this List) are those that will be supplied directly to water suppliers for use in direct contact with water intended for human consumption. Materials used to make products used in water networks, treatment plants etc., are outside the scope of this remit and are not, therefore included in this List.

However it has proved helpful to manufacturers and suppliers of such products to provide details of suitable materials known not to have adverse effects on water quality or pose unacceptable health risks to consumers. Details of such “recognised materials” are incorporated into Advice Sheet 5, and cover particular grades of materials for use in the –

- extrusion of thermoplastics pipes
- factory application of coatings to products
- manufacture/fabrication of stainless steel structures

Advice Sheet 5 explains, in detail, how applications for approval of products made from these recognised grades of specific material types are handled. The listing of recognised materials in the Annexes of this Advice sheet does **NOT** imply –

- a) recommendation or approval of the material by DWI
- b) that products made from the grades listed will have suitable fitness for purpose qualities for their proposed use
- c) that no further testing will be required before a recommendation for approval can be made

**NOTE - these materials have NOT been approved under the relevant Regulations , but are “recognised” as suitable for use in the manufacture of such products, subject to satisfactory results in any subsequent limited testing required. See Advice Sheet 5 for further information, including how to gain recognised status for a particular material – <http://www.dwi.gov.uk/31/pdf/Advicesheet5.pdf>**



**MANUFACTURERS' AND SUPPLIERS' ADDRESSES**

**3M E Wood**  
**Corrosion Protection**  
**Products**  
**3M United Kingdom PLC**  
 Standard Way  
 Northallerton  
 North Yorkshire  
 DL6 2XA  
**Tel: 01609 780170**

**ABC Stainless Steel Ltd**  
 Empson Road  
 Eastern Industry  
 Peterborough  
 PE1 5UP  
**Tel: 01733 314515**

**AJ Engineering &**  
**Construction Services Ltd**  
 West Road  
 Greshop Industrial Estate  
 Forres  
 Moray  
 IV36 2GW  
**Tel: 0.1309 671919**

**Alpha Plus Ltd**  
 336 Coleford Rd  
 Darnall  
 Sheffield, South Yorkshire  
 S9 5PH  
**Tel: 0114 243 3594**

**Amari Metals Ltd**  
 The Hersham Centre  
 Hersham Green  
 Hersham  
 Surrey  
 KT12 4HP  
**Tel: 01932 250100**

**Amazon Filters Ltd**  
 Albany Park Estate  
 Frimley Rd  
 Camberley  
 Surrey  
 GU16 7PG  
**Tel: 01276 670600**

**AMT Systems Ltd**  
 Unit 14, West Stocwith Park  
 Stockwith Road  
 Misterton  
 Doncaster  
 DN10 4ES  
**Tel: 01427 890022**

**Angus Fire Armour Ltd**  
 Station Road  
 Bentham  
 Lancaster  
 LA2 7NA  
**Tel: 01524 261947**

**Arlington Packaging**  
**(Rental) Ltd**  
 Units 16/17  
 Salisbury Road  
 Business Park  
 Pewsey  
 SN9 5PZ, England  
**Tel: 01672563723**

**APT Marine Engineering**  
**Ltd**  
 Humber Bank South  
 Fish Docks  
 Grimsby  
 North East Lincolnshire  
 DN31 3SD

**Aqua Cure plc**  
 Aqua Cure House  
 Hall Street  
 Southport, Merseyside  
 PR9 0SE  
**Tel: 01704 516 916**

**Aquabiotics Pty Ltd**  
 14 Goongarrie Street  
 Bayswater 6053  
 Western Australia  
**Tel: 0061 89379 2911**

**Arkal Filtration Systems**  
**CS Ltd**  
 Kibbutz Bet Zera  
 MP Jordan Valley 15135  
 Israel  
**Tel: 00972 6 6775140**

**Ashland Drew Industrial**  
**Division**  
 Pesetastraat 5  
 2991 XT Barendrecht  
 The Netherlands  
**Tel: 0031 10 5497 5000**

**Asset International Ltd**  
 Stephenson Street  
 Newport  
 South Wales  
 NP19 4XH  
**Tel: 01633 273081**

**ASD Metal Services**  
 Valley Farm Road  
 Stourton  
 Leeds  
 West Yorkshire  
 LS10 1SD  
**Tel: 0113 2540711**

**Atkins Fulford Hydro Ltd**  
 51 Maurice Gaymer Road  
 Gaymers Industrial Estate  
 Attleborough, Norfolk  
 NR17 2QZ  
**Tel: 01473242929**

**Atkinson Chemicals Ltd**  
 24 High Street  
 Twyford  
 Reading  
 Berkshire  
 RG10 9AB  
**Tel: 01734 342289**

**Avista Technologies (UK)**  
**Ltd**  
 Waterside House  
 PO Box 28612  
 Edinburgh  
 EH14 5ZL  
**Tel: 01189 669645**

**Aztec Environmental Controls**  
Sittingbourne Industrial Park  
Crown Quay Lane  
Sittingbourne  
Kent  
ME10 3JG  
**Tel: 01795 476241**

**Barnard Ltd**  
Lower Tower Street  
Birmingham  
B19 3NL  
**Tel: 0121 359 5531**

**Barrier Limited**  
Pearl Buildings  
Stephenson Street  
Willington Quay  
Wallsend  
NE28 6UE  
**Tel: 0191 262 0510**

**BASF Construction Chemicals (UK) Ltd**  
19 Broad Ground Road  
Lakeside, Redditch,  
Worcestershire, B98 8YP  
**Tel: 01527 5052**

**BOC**  
Water Treatment  
Technologies  
26 Nailsworth Mills Estate  
Nailsworth  
Gloucestershire  
GL6 0BS  
**Tel: 01453 836621**

**Bournemouth and West Hampshire Water Plc**  
George Jessel House  
Francis Avenue  
Bournemouth  
BH11 8NB  
**Tel: 01202 597020**

**British Cement Association**  
Riverside House  
4 Meadows Business Park  
Station Approach  
Blackwater  
Camberley  
Surrey  
GU17 9AB  
**Tel: 01276 608700**

**BSR Pipeline Services Ltd**  
Brenda Road  
Hartlepool  
S25 2EG  
**Tel: 01429 527286**  
**Buderus Giesserei Wetzlar GmbH**  
Pipe Casting Division  
Sophiestraße 52-54  
35576 Wetzlar  
Germany  
**Tel: 0049 64 41 49 15 62**

**Carus Chemical Company**  
315 5<sup>th</sup> Street  
Peru IL 61329  
USA  
**Tel: 001 815 223 1500**

**Celtic Vacuum Ltd**  
The Salterns  
Marsh Road  
Tenby  
Pembrokeshire  
SA70 8EP  
**Tel: 01834 845511**

**Ceratherm Ltd**  
11 Mill Hey Road  
Caldy  
Wirral  
CH48 1ND  
**Tel: 0870 121 2880**

**Ciba UK plc**  
PO Box 38  
Bradford  
West Yorks  
BD12 0JZ  
**Tel: 01274 417000**

**Clinty Chemicals Ltd**  
215 Doury Rd  
Ballymena  
CO Antrim  
BT43 6SS

**Compressor & Power Engineers Ltd**  
Apollo  
Lichfield Road In Est  
Tamworth  
B79 7TA  
**Tel: 01827 68710**

**Conline Coatings B.V.**  
Adriaan van Heelstraat 19  
Postbus 96  
3140 ab maassluis  
The Netherlands  
**Tel: +31 (010) 5931400**

**Corroless Corrosion Control**  
Kelvin Way  
West Bromwich  
West Midlands  
B70 7JZ  
**Tel: 0121 524 2235**

**Crossland Tankers (Burnley) Ltd**  
Shuttlework Mead Business Park  
Blackburn Road  
Burnley  
BB12 7SN  
**Tel: 01282 775500**

**Damstahl Stainless Ltd**  
Halesfield 4  
Telford  
Shropshire  
TF7 4AP  
**Tel: 01952 583999**

**Degremont UK Limited**  
Water and Waste Treatment  
Gainsborough House  
Houghton Hall Park,  
Houghton Regis  
Dunstable, Bedfordshire  
LU5 5TD  
**Tel: 01582 631111**

**DH Stainless Ltd**  
Springvale Mill  
Waterside Road  
Haslingdon, Lancashire  
BB4 SE2  
**Tel: 01706 230066**

**DRC Polymer Products Ltd**  
1 Regal Lane, Soham  
Ely, Cambs  
CB7 5BA  
**Tel: 01353 720989**

**Dryden Aqua Ltd**  
Butlerfield  
Bonnyrigg  
Edinburgh  
EH19 3JQ  
**Tel: 01875 822222**

**Durapipe UK**  
Wallsall Road  
Norton Canes  
Cannock  
Staffordshire WS11 9NS  
**Tel: 01543 279909**

**Dustacco Engineering Ltd**  
Tower works  
Stoneygate Road  
Newmilns  
Ayrshire  
KA16 9AJ  
**Tel: 01560 321394**

**Dyka B.V.**  
Postbus 33  
8330 AA Steenwijk  
The Netherlands

**Dyka Plastics NV**  
Nolimpark 4004  
Sturfzandstraat 47  
B-3900 Overpelt  
Belgium  
**Tel: 0032 11 80 04 20**

**Dyka (UK) Ltd**  
65-69 Ellingham Way  
Ashford, Kent  
TN23 6JU  
**Tel: 01233 634438**

**EBERO Pipe Systems Ltd**  
Turnoaks Business Park  
Burley Close  
Chesterfield  
S40 2UB  
**Tel: 01246 563153**

**Egeplast Werner Strumann GmbH & Co**  
Roberts-Bosch-Str.7  
D-48268 Greven  
Germany

**Electrosteel Castings Ltd**  
30 B. T. Road  
P. O. Sukchar  
Dist. 24 Parganas (North)  
West Bengal  
INDIA  
**Tel: 0091 33 553 2958/2987**

**EPSCO Ltd**  
Arran Road  
Perth, Perthshire  
Scotland  
PH1 3DZ

**F B Leopold Co Inc**  
227 S. Division Street  
Zelienople, PA 16063  
USA  
**Tel: 001 412 452 6300**

**Fileder Filter Systems**  
St Leonard's Rd  
20/20  
Maidstone  
Kent  
ME16 0LS  
**Tel: 01622 621949**

**Flexcrete Technologies Ltd**  
Tomlinson Road,  
Leyland, Lancashire  
PR25 2DY  
**Tel: 0845 260 7005**

**Forbes Technology Ltd**  
Denver, Downham Market  
Norfolk  
PE38 0DR  
**Tel: 01366 388941**

**Fosroc Ltd**  
Drayton Manor Business  
Park, Coleshill Road,  
Tamworth  
Staffs, B78 3TL  
**Tel: 01827 262222**

**Floran Technologies Inc**  
801 SW 89th Street  
Bldg. B  
Oklahoma City  
USA, OK 73139  
**Tel: 001 405 631-1558**

**Frazer & Tabberer Ltd**  
Unit 6  
Riland Industrial Estate  
Sutton Coldfield  
West Midlands  
B75 7BB  
**Tel: 0121 311 2606**

**Freeflow Pipesystems Ltd**  
Autobase Industrial Park  
Tipton Road  
Tividale  
Oldbury  
West Midlands, B69 3HE  
**Tel: 0121 522 3552**

**Fuchs Rohr GmbH**  
In Der Steinwiese 31  
D-57074 Siegen  
Germany

**Fullstop Technology Ltd**  
Caiden House  
Canal Road  
Timperley  
Cheshire  
WA14 1TE  
**Tel: 0161 962 8093**

**Fusion Provida**  
Smeakley Wood Close  
Chesterfield Trading Est  
Chesterfield  
S41 9PZ  
**Tel: 01246 260111**

**Future Pipe Industries  
B.V**  
Level 1, Whitlock House  
6 Earls Court Road  
LONDON  
W8 6EA  
**Tel: 020 7938 4942**

**Gallagher & McKinney  
Ltd**  
Carrakeel Drive  
Maydown Industrial Estate,  
Derry  
Northern Ireland  
BT47 6UQ  
**Tel: 02871 861069**

**GB Filters Ltd**  
37 Hanbury Rd  
Widford Industrial Estate  
Chelmsford  
Essex  
CM1 3AE  
**Tel: 01245 240880**

**GE Betz Ltd**  
Foundry Lane  
Ditton  
Widnes  
Cheshire  
WA8 8UD  
**Tel: 0151 424 5351**

**GEH Wasserchemie  
GmbH**  
Heinrich Hasemeier Straße  
33  
D-49076 Osnabrück  
Germany  
**Tel: 0049 54112 2009**

**Genesys International Ltd**  
Genesys House  
204 Lent Rise Road  
Burnham  
Bucks  
SL1 7AB  
**Tel: 01628 667605**

**George Fischer Sales Ltd**  
Paradise Way  
Coventry  
CV2 2ST  
**Tel: 024 7653 0450**

**George Green (Keighley)  
Ltd**  
Parkwood Works  
Parkwood Street  
Keighley  
West Yorkshire  
BD21 4PN  
**Tel: 01535 603728**

**GPS**  
Walsall Road  
Norton Canes  
Cannock  
Staffordshire  
WS11 3NS  
**Tel: 01543 279909**

**Gulf Specialised Water  
Services Ltd**  
PO Box 158  
Plymouth  
PL6 7WE  
**Tel: 01752 773071**

**Hepworth Building  
Products Ltd**  
Edlington Lane,  
Edlington,  
Doncaster,  
DN12 1BY  
**Tel: 01709 856300**

**High Chemicals (UK) Ltd**  
Unit 18  
Tafarnaubach Industrial  
Estate  
Tredegar  
Gwent  
NP2 3AA  
**Tel: 01495 717007**

**Hydranautics BV**  
PO Box 4006  
Pangbourne  
RG8 7WB  
**Tel: 0118 984 3106**

**Iniziative Industriali SpA  
(Sarplast)**  
Via Roginanina 14  
Localita Macchiaverde  
56040 Santa Luce (Pisa)  
ITALY  
**Tel: 0039 050 691 745**

**Ionics (UK) Ltd**  
Unit 1, Gnd Floor, HQ3  
225 Hook Rise South,  
SURBITON, KT6 7LD  
**Tel: 020 8391 7980**

**IQL Ltd**  
Stirling Road  
Cressex Business Park,  
High Wycombe  
Bucks HP12 3ST  
**Tel: 01494 463636**

**ITW Irathane  
International**  
Brunel Close  
Park Farm Industrial Estate  
Wellingborough  
Northamptonshire  
NN8 6QX  
**Tel: 01933 675099**

**JFC Manufacturing  
(Europe) Ltd**  
Maes Y Clawydd Industrial  
Estate  
Maesbury Road  
Oswestry  
Shropshire  
SY10 8NN  
**Tel: 01403 892502**

**J.K Fabrications Limited**  
Unit 5  
Carnbane Business Park  
Newry  
Co. Down,  
BT35 6QH  
**Tel: 028 3025 2142**

**Johnson Filtration System**  
ZI Millonerie  
Availles-en-Châtellerault  
86530 France  
**Tel (F): 0033 549 021600**  
**Tel (UK): 01344 762550**

**Kalsep UK Ltd**  
Dorman Road  
Yorktown Industrial Estate  
Camberley  
Surrey  
GU15 3DF  
**Tel: 01276 675675**

**Kemira Chemicals b.v**  
Kemira Water Solutions BV  
Botlekweg 175  
3197 KA Botlek Rotterdam  
The Netherlands  
**Tel: 0031 181 295 800**

**Kingspan Environmental  
Containers**  
Seapatrick Road  
Banbridge  
Co. Down  
BT32 4PH  
**Tel: 028 4062 6260**

**Koch Membrane Systems**  
The Granary  
Telegraph Street  
Stafford  
ST17 4AT  
**Tel: 01785 272500**

**KWH Pipe (UK) Ltd**  
Reg. Office  
Brunleys  
Kiln Farm  
Milton Keynes  
MK11 3EW  
**Tel: 01908 262426**

**Lancashire Fittings Ltd**  
The Science Village  
Claro Road  
Harrogate  
HG1 4AF  
**Tel: 01423 522355**

**Lanxess Deutschland  
GmbH**  
Inorganic Pigments,  
Research  
D-47812 Krefeld  
Geb. R 54, Germany  
**Tel: 49 2151/88-8548**

**Leighs Paints**  
Tower Works  
Kestor Street  
Bolton  
BL2 2AL  
**Tel: 01204 521771**

**L.E.S Engineering Ltd**  
Armstrong St  
West Marsh Ind Est  
Grimsby  
North East Lincs  
DN31 1XD  
**Tel: 01472 353516**

**Leyfos Plastics Limited**  
Rosehill Industrial Estate  
Tern Hill  
Nr Market Drayton  
Shropshire  
TF9 2JU  
**Tel: 01630 638557**

**Memcor Ltd**  
Outram's Wharf  
Alfreton Road  
Little Eaton  
Derbyshire  
DE21 5EL  
**Tel: 01332 387300**

**Midas Technologies (GB)  
Ltd**  
Unit A Roundhouse Close  
Eastern Industry  
Petersborough  
PE1 5TA  
**Tel: 01733 342600**

**Midland Wire Cordage Co  
Ltd**  
Wire Rope House  
Eagle Road  
North Moons Moat  
Redditch  
Worcestershire  
B98 9HF  
**Tel: 01527 594150**

**MMP Fabrications Ltd**  
Highfield Works  
Highfield Industrial Estate  
West End Street  
Oldham, OL9 6AJ  
**Tel: 0161 624 3303**

**Nalco Europe b.v**  
PO Box 11  
Winnington Avenue  
Northwich  
Cheshire  
CW8 4DX  
**Tel: 01606 721629**

**Natural Cement  
Distribution Ltd**  
Unit 12, Redbrook Business  
Park  
Wilthorpe Road  
Barnsley  
South Yorkshire  
S75 1JN  
**Tel: 01226 299333**

**Nijhuis Water Technology  
B.V.**  
Anholteseweg 32  
Dinxperlo  
The Netherlands  
7091 HB  
**Tel: 0031 315 655 494**

**NKT Flexibles**  
Priorparken 510,  
DK-2605 Brøndby,  
Denmark  
**Tel: 0045 4348 3000**

**Noksel Steel Pipe Co Inc**  
Çetin Emeç Bulvarı 2. CAD  
No:10  
Överçler/Ankara – Turkey  
06450  
**Tel: 0090 312 472 59 59**

**Northpoint Ltd**  
Globe Lane  
Dukinfield  
Cheshire SK16 4UY  
**Tel: 0161 330 4551**

**Orica UK Limited**  
Watercare Europe  
Roburite Centre  
Gathurst Lane  
Shevington – Wigan  
Lancashire  
WN6 8HT  
**Tel: 01257 256100**

**Orrmac Coatings Limited**  
Thorncliffe Park Estate  
Chapelton  
Sheffield  
S35 2PH  
**Tel: 0114 246 1237/245  
4211**

**OTV Ltd**  
I-Aquarene  
1 Place Montgolfier  
94417 Saint-Maurice Cedex  
France  
**Tel: 0033 5 45 11 55 35**

**Outokumpu Stainless Ltd**  
PO Box 161  
Shepcote Lane  
Sheffield Lane  
Sheffield  
S9 1TR  
**Tel: 0114 261 4217**

**Pall Europe Ltd**  
Europa House  
Havant Street  
Portsmouth  
PO1 3DD  
**Tel: 01705 303303**

**Panton McLeod Ltd**  
Waverley Place  
Newtown St Boswells  
Melrose  
TD6 0RS  
**Tel: 01835 822835**

**Paques B.V.**  
T. de Boerstraat 24  
PO Box 52  
8560 AB Balk  
The Netherlands  
**Tel: 0031 514 608500**

**Passavant-Roediger-  
Anlagenbau GmbH**  
Kinzigheimer Weg 104-106  
63450 Hanau  
Germany

**PCI Membrane Systems  
Ltd**  
Viables Estate  
Basingstoke  
Hampshire  
RG22 4BA  
**Tel: 01256 303800**

**Permacare - Membrane  
Separations Group**  
Ondeo Nalco Ltd  
PO Box 11  
Northwich  
Cheshire  
CW8 4DX  
**Tel: 0160 674488**

**Permastore Ltd**  
EYE  
Suffolk  
IP23 7HS  
**Tel: 01379 870723**

**Pipelife Norge AS**  
Postboks 74  
Skherkoya  
N-3995 Stathelle  
Norway

**Pipeline Protection  
Services Ltd**  
West Side  
Tyne Dock  
South Shields  
NE34 9PX  
**Tel: 0191 456 0386**

**Plastic Coatings Ltd**  
Southern Division  
Woodbridge Meadows  
Guilford, Surrey  
DU1 1BG

**Polypipe (Ulster) Ltd**  
Dromore Road  
Lurgan  
Craigavon  
Co. Armagh  
BT66 7HL

**Polypipe Building  
Products**  
Broomhouse Lane  
Edlington  
Doncaster  
DN12 1ES  
**Tel: 01709 770000**

**Portobello Fabrications Ltd**

3 Longacre Close  
Holbrook  
Sheffield  
S20 3FR  
Tel: 0870 4284406

**Powerrun Project Management Ltd**

Prospect Works  
South Street  
Keighley  
West Yorkshire  
Tel: 01535 667614

**Pridesa Proyectos e Instalaciones de Desalación S.A.**

C/ Ramon Rubial n° 2  
48950 Erandio  
Vizcaya  
Spain  
Tel: 0034 94 605 0700

**Proton Water Services Ltd**

Unit 2, Priory Business Park  
Wistow Rd  
Kibworth, Leics.  
LE8 9FH  
Tel: 0116 279 6464

**Purac Limited**

Purac House  
Birmingham Road  
Kiddeminster  
Worcestershire  
DY10 2SH  
Tel: 01562 820010

**Purolite International Ltd**

Cowbridge Road  
Pontyclun  
Mid Glamorgan  
CF72 8YL  
Tel: 01443 229 334

**Quality Plastics Ltd**

PO Box 29  
White's Cross  
Cork  
Ireland  
Tel: 00353 21 884700

**Quantum Engineering Developments Ltd**

Quantum House  
West Court  
Saxon Park  
Stoke Prior  
Bromsgrove  
Worcs. B60 4AD  
Tel: 01527 577888

**Radius Systems Ltd**

Hilcote Plant  
P.O. Box 1  
Blackwell  
Nr Alfreton  
Derbyshire  
DE55 5JD  
Tel: 01773 811112

**Rapak**

Butlers Leap  
Clifton Road  
Rugby  
Warwickshire  
CV21 3RQ  
Tel: 01788 570612

**R Spang GmbH**

Schafmatt 5  
D-79618  
Rheinfelden  
Germany

**ROAM chemie NV**

Industrieterrein Centrum  
Zuid 2053  
3530 Houthallen  
Belgium  
Tel: 0032 11 60 2978

**Rohm and Haas Ltd**

Herald way  
Coventry  
CV3 2RQ  
Tel: 02476 653 760

**SafeSol Ltd**

7 Royal Terrace  
51 Mount Stuart Road  
Rothesay  
Isle of Bute  
PA20 9EB  
Tel: 01700 500623

**Saint-Gobain Pipelines plc**

Lows Lane  
Stanton-By-Dale  
Ilkeston  
Derbyshire, DE7 4QU  
Tel: 0115 930 5000

**Samuel Cooke & Co Ltd**

The Oil Terminal  
Wyre Street  
Padiham, Burnley  
BB12 8DF  
Tel: 01282 777797

**Sandvik Materials Technology UK**

Manor Way  
Halesowen  
West Midlands  
B62 8QZ  
Tel: 0121 504 5111

**Sarnafil Ltd**

Robberds Way,  
Bowthorpe  
Norwich NR5 9JF  
UK  
Tel: 01603 7489 85

**Scottish Water Solutions**

Torrison House  
Beechwood Business Park  
Inverness  
IV2 3BV  
Tel: 01463 228 102

**Sertubi Spa**

Via K.L. Von Bruck 32  
34143 Trieste  
ITALY  
Tel: 0039 040 31 73 111

**Severn Trent Services Ltd**  
Park Lane, Minworth,  
Sutton Coldfield  
West Midlands  
B76 9BL  
**Tel: 0121 313 2300**

**Sika Ltd**  
Watchmead  
Welwyn Garden City  
Herts., AL7 1BQ  
**Tel: 01707 329241**

**Silotank (Digestors, Silos  
& Tanks) Ltd**  
Pembroke Loop Road  
Springbank Industrial Estate  
Poleglass, Dunmurry  
Belfast  
BT17 0QL  
**Tel: 02890 626256**

**Simona UK Ltd**  
Telford Drive  
Brookmead Industrial Park  
Stafford  
ST16 3ST  
**Tel: 01785 222444**

**Singleton Birch Ltd**  
Melton Ross Quarries  
Barnetby  
North Lincolnshire  
DN38 6AE  
**Tel: 01652 686000**

**Snap-Tite Europe. B.V.**  
Industrial Estate  
Whitemill  
Wexford  
Republic of Ireland  
**Tel: 00353 534 1566**

**Stainless Metric Stock Ltd**  
PO Box 17  
Bull Hill Works  
Bolton Road  
Darwen  
Lancashire, BB3 2TT  
**Tel: 01254 775133**

**Staptina Engineering  
Services Ltd**  
Pennine Works  
Grantham Road  
Boothtown, Halifax  
W. Yorkshire, HX3 6PL  
**Tel: 01422 350357**

**Stevens Geomembranes -  
JPS Elastomerics**  
Nine Sullivan Road  
Holyoke  
MA 01040 2800  
USA  
**Tel: 001 413 552 1000**

**Subterra – a division of  
Daniels Contractors Ltd**  
Dullar Lane  
Sturminster Marshall  
Wimborne  
Dorset  
BH21 4AD  
**Tel: 01258 857556**

**Swissteril International  
5755 Ltd**  
5 HaChita Street  
Post Office Box 10079  
Haifa Bay 26110  
Israel  
**Tel: 00972 4 8410114/5/6**

**TBS Elastomers**  
Suite 3D, Willow House  
Stratclyde Business Park  
Bellshill,  
Lanarkshire, Scotland  
ML43PB  
**Tel: 01698 464 621**

**Tevan B.V.**  
4200 AA Gorinchem  
The Netherlands  
**Tel: 0031 183 621799**

**Trailer Engineering Ltd**  
Central Avenue  
Corngreaves Trading Estate  
Cradley Heath  
West Midlands  
B64 7BY England  
**Tel: 01384 564765**

**Uponor Ltd**  
Bishopstown  
Cork  
Ireland  
**Tel: +353 (0) 21 4541834**

**USFilter-Memcor,  
Microfloc and General  
Filter Products**  
600 Arrasmith Trail  
Ames, Iowa  
USA  
50010-9760  
**Tel: 001 515-268-8500**

**Vandex International Ltd**  
Rottristrasse 6,  
P.O.Box  
CH-4501  
Solothurn  
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**Tel: +41 32 626 36 36**

**Veolia Water Systems Ltd**  
Aqua House  
2620 King's Court  
Birmingham Business Park  
Birmingham  
B37 7YE  
**Tel: 0121 329 4000**

**Vexamus Water Ltd**  
Kiln Lane  
Prickwillow Road  
Ely  
Cambridgeshire  
CB7 4TX  
**Tel: 01 353 645 700**

**Vulcan Tanks Ltd**  
Cotes Park Lane  
Cotes Park Industrial Estate  
Alfreton, Derbyshire  
DE55 4NJ  
**Tel: 01773 835321**

**Wallace and Tiernan Ltd**  
Priory Works  
Tonbridge  
Kent  
TN11 0QL  
**Tel: 01732 771777**



**Waterman Environmental Services Ltd**

Unit 36  
Minworth Industrial Park  
Forge Lane  
Minworth  
Sutton Coldfield  
West Midlands  
B76 1AH  
**Tel: 0121 352 3700**

**Water Treatment Products Limited**

Gilchrist Thomas Industrial Estate  
Blaenavon  
Pontypool  
NP4 9RL  
**Tel: 01495792090**

**Wavin Ireland Ltd**

Balbriggan  
Co. Dublin  
Ireland  
**Tel: 00353 1 841 5000**

**Wavin Plastics Ltd**

Meadowfield Industrial Estate  
Meadowfield  
Brandon  
Durham  
DH7 8RJ  
**Tel: 0191 378 0841**

**Weir Materials & Foundries**

Park Works,  
Grimshaw Lane  
Newton Heath,  
Manchester  
M40 2BA  
**Tel: 0161 954 4213**

**Western**

Western House  
Broad Lane  
Yate, Bristol,  
22 The Green  
BS37 7LB  
**Tel: 01454 227277**

**Whale Tankers Ltd**

Ravenshaw  
Solihull  
West Midlands  
B91 2SU  
**Tel: 0121 704 5759**

**Wolseley UK Ltd**

The Wolseley Centre  
Harrison Way  
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CV31 3HH  
**Tel:01926 705803**

**X-FLOW B.V.**

PO Box 739  
7500 AS ENSCHEDE  
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**Zenon Environmental Inc**

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**Tel: 001 905 332 6694**

**Zenon Europe Kft**

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